

**HOW DO EXTRINSIC PERFORMANCE INCENTIVES AFFECT  
THE ALIGNMENT BETWEEN FRONTLINE POLICE  
PERFORMANCE AND POLICE STRATEGY?**

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## **ABSTRACT**

This research explored how extrinsic performance incentives (EPIs) affect the alignment of frontline police performance and police strategy using the Hong Kong Police Force as a case study.

A formal research model was developed and used to explore the correlations between EPIs and organisational alignment, between EPIs and constructs of individual performance and between individual performance and organisational alignment. A combined methodology was adopted using questionnaires and semi-structured interviews to test the formal research theory.

The findings indicate that there is a significant relationship between EPIs, when measured in terms of effort reward imbalance (ERI), and organisational alignment, but not generally between the realisation or expectation of an EPI and organisational alignment. There are no consistent patterns or relationships between EPIs and the constructs of individual performance. The effect of EPIs on the alignment of frontline police performance and police strategy is influenced by the officer's career stage. The results and findings support the notion that stewardship theory fits the case organisation more closely than agency theory.

This research contributes to the body of knowledge relating to the effects of EPIs on frontline performance and organisational alignment. Further research should apply the research model to other case settings.

## **DEDICATION**

To Bernice.

## **ACKNOWLEDGEMENTS**

This journey has only been possible with the kind support and understanding of several groups and individuals along the way.

I would like to express my appreciation to the Commissioner of Police and the officers of the Hong Kong Police Force for the opportunity to conduct this research. I acknowledge the support of Chief Superintendent David Gunton, Chief Superintendent Kenneth Davey, Senior Superintendent Jeffrey Herbert (Retired), Senior Superintendent Percy Fung and Senior Superintendent Steve Wordsworth, all of whom made my life a little easier during the period of my research.

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## **GLOSSARY**

ACOMVALI	Realised commendation, with duration and value factored
ADAPT/Adaptive	Adaptive behaviour
ALIGNMT	Self-reported aligned behaviours
APROVALI	Realised promotion, with duration and value factored
ARF	Annual Report Rating / Annual Report Form
CMV	Common method variance
COLALIGN	Colleagues' aligned behaviour
COMPSTAT	A system of computer comparisons of standard crime statistics
DK	Declarative knowledge
DV	Dependent variable
ECOMVALI	Expected commendation, with duration and value factored
EPI	Extrinsic performance incentive
EPROVALI	Expected promotion, with duration and value factored
ERI	Effort-reward imbalance
GENDER	Gender
GOALCON	Goal congruence
Group A Officers	Frontline police officers relatively junior in service
Group B1 Officers	Frontline police officers approaching the promotion bracket
Group B2 Officers	Frontline police officers in the promotion bracket
Group C Officers	Frontline police officers with little prospect of promotion
HKPF/the Force	Hong Kong Police Force
IRB	In-role behaviour
IV	Independent variable
JAI	Job Adaptive Inventory
JOBSTR	Career stream / job stream

M	Motivation
MV	Mediating variable
OCB	Organisational citizenship behaviour
OCBI	OCB directed towards the individual
OCBO	OCB directed towards the organisation
OVERCOM	Overcommitment on the Effort Reward Imbalance Scale
PKS	Procedural knowledge and skills
RANK	Rank of Officer
SPSS	Statistical Package for the Social Sciences

# CHAPTER 1

## INTRODUCTION

### 1.1 Background

There are two major challenges in strategic management. The first is in aligning the strategy of an organisation with the operating environment - external alignment. The second is in aligning the resources and activities of an organisation with the strategy - internal alignment (Miles and Snow, 1978; Venkatraman and Camillus, 1984). The literature indicates that organisations with high degrees of external and internal alignment will achieve superior performance when compared with organisations with poor alignment (Bradach, 1996; Porter 1996; Kaplan and Norton 2006).

To improve the internal alignment of an organisation's resources and activities with the organisational strategy, a number of approaches are adopted. Approaches work both horizontally, with the aim of achieving optimum synergies across the functional and geographical silos of an organisation, and vertically through the various layers of management and supervision (Labovitz and Rosansky, 1997) to ensure that the intended strategy is realised on the frontline (Mintzberg, 1978). One such approach, an application of agency theory (Jensen and Meckling, 1976, Eisenhardt, 1989a), is to use extrinsic performance incentives (EPIs) to manipulate the performance of frontline employees such that it is aligned with the strategy of senior management (Roberts and MacLennan, 2003).

Support for the theories and practice of using EPIs to improve internal organisational alignment is largely based on anecdotal evidence, experimental research and a limited amount of empirical research (Papke-Shields and Malhotra, 2001). However, several of the key supporting theories have been convincingly contested in the literature. For example, agency theory, which is based on the premise of frontline employees' utility maximising behaviour, is challenged by stewardship theory, based on the premise of pro-organisational and collectivist behaviour (Davis *et al.*, 1997). Furthermore, general interest theory, which suggests that extrinsic rewards for performance have a positive effect on frontline performance (Eisenberger *et al.*, 1999), is challenged by crowding out theory, which suggests that intrinsic motivation and ultimately individual

performance is negatively affected by extrinsic rewards (Frey and Jegen, 2001). It appears that in different organisational contexts, competing theories may be applicable to different degrees.

In many of the texts on organisational performance management and strategic control, extrinsic rewards and performance incentives are promoted as a way to manipulate the activities of an agent in order that they are aligned with the aims of the principal (Jensen and Meckling, 1976). For frontline police officers, the main EPIs are rewards, such as promotion, with the associated benefits of increased salary and recognition, commendations and positive appraisals, or alternatively punishments such as negative appraisals, disciplinary action or dismissal (Collier, 1997).

This research study explored the effects of EPIs on the performance of frontline police officers in the Hong Kong Police Force, specifically in terms of the internal alignment of individual performance with the police strategy.

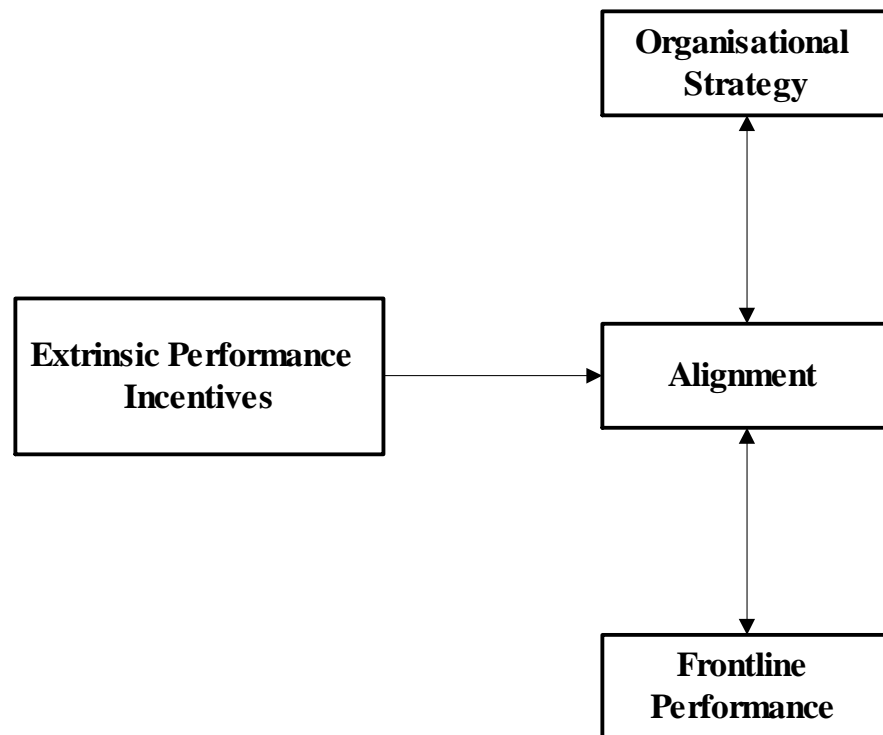
Much of the literature relevant to the research topic is based on research conducted in the private sector, and in particular, in manufacturing organisations based in Europe and the United States. Consequently, there appears to be a gap in the body of knowledge regarding the effects of EPIs in public sector organisations operating in Asia. There has been little research on how performance related rewards affect the activities and behaviour of police officers when conducting their frontline duties and it cannot be ascertained from the literature whether EPIs are an effective way of aligning frontline police officers' performance with police strategy.

The researcher is a police officer serving in the Hong Kong Police Force. His interest in this study comes as a result of discussions with frontline police officers on the potential positive and negative effects that certain incentives have on the performance and behaviour of frontline officers.

This study contributes to the body of empirical research on the effects of EPIs on the alignment between frontline performance and organisational strategy by conducting research in a police organisation setting in Asia. Quantitative methods were used to establish correlations between EPIs and the alignment of frontline performance and



between EPIs and individuals' alignment with the organisational strategy. Qualitative methods were used to explore the correlations that are established and to consider causation. The applicability of agency theory and stewardship theory in the context of a police force is explored and a formal research theory is developed and tested in the main study. The basic research framework is shown at figure 1.1. The results of the study help to enhance the understanding of the practical use of extrinsic rewards in aligning frontline performance with organisational strategy.



*Figure 1.1 - Basic Research Framework*

## **1.2 Research Question**

The research question is:

*How do extrinsic performance incentives affect the alignment between frontline police performance and police strategy?*

### 1.3 **Thesis Structure**

The research question has called for a broad literature review, encompassing topics from the literature on strategic management, operations management and human resources management, and a combined research approach, using both quantitative and qualitative methods. This thesis is presented in nine chapters:

#### 1.3.1 *Chapter 2 - Literature on Organisational Alignment*

Internal organisational alignment is aimed at realising the intended organisational strategy at the frontline. Organisational alignment is both a process and a state, involving a complex set of interdependencies, both vertically, from the top management team to the frontline, and horizontally, across the various functional and geographical silos of an organisation (Labovitz and Rosansky, 1997; Joshi *et al.*, 2003). Chapter two explores the literature on organisational alignment from three fields of research and compares the three main approaches to the topic.

#### 1.3.2 *Chapter 3 - Literature on Individual Performance*

In this research, frontline police performance is concerned with the individual performance of frontline police officers in terms of their task, contextual and adaptive performance (Schmitt *et al.*, 2003). Task performance is that which is usually set out in a job description and might traditionally have been measured in performance appraisals. Contextual performance relates to the supporting behaviour of an employee, both in terms of support to the organisation in general and support to other teams and individuals in the organisation. Such supporting behaviour is often not specifically articulated in job descriptions but is considered to be essential for organisational performance (Motowidlo and Van Scotter, 1994). Adaptive performance represents the dimension of individual performance in adapting to new or changing work requirements (Pulakos *et al.*, 2000). The chapter reviews the literature on individual performance and presents a combined model of individual performance.

### 1.3.3 Chapter 4 - Literature on Extrinsic Performance Incentives

EPIs are external rewards that are not inherent to a task or function but are used to motivate someone to perform that task or function. EPIs include performance related pay, promotion, awards and prizes. It is common for organisations to use EPIs to guide or manipulate the activities and behaviour of frontline employees in an attempt to align them with the organisational strategy (Deci *et al.*, 1999). However, such incentives can affect both extrinsic and intrinsic motivation in positive and negative ways and can lead to dysfunctional behaviour (Courty and Marschke, 2004). Chapter four introduces the concepts of extrinsic and intrinsic motivation, compares agency theory and stewardship theory (Jensen and Meckling, 1976; Davis *et al.*, 1997), considers general interest theory and crowding out theory and presents the literature on EPIs (Eisenberger *et al.*, 1999; Frey and Jegen, 2001). Also included is a section on the concept of effort-reward imbalance (ERI), borrowed from medical research for exploratory consideration in this research as a method of measuring EPIs (Siegrist *et al.*, 2004).

### 1.3.4 Chapter 5 - Literature Synthesis and the Development of the Basic Theory

Chapter five begins with a short summary of the literature review. It develops on the review to introduce a basic research model that outlines the relationships between EPIs and organisational alignment, and EPIs and the constructs of individual performance. In addition, the model considers the association between frontline individual performance and organisational alignment. The literature relating to studies that have previously explored these and similar relationships is introduced and several gaps in the literature are exposed. The synthesis of the literature leads to the development of a set of propositions that describe possible relationships between the elements of the basic research model. These propositions were further explored using a pilot study.

### 1.3.5 Chapter 6 - The Pilot Study and the Formal Research Theory

The pilot study comprised a three-part questionnaire and several informal but focused discussions with police officers who were attending a research methodology course. The pilot study was conducted early on in the research in order to develop the basic research theory and to narrow the focus of the research to a small number of distinct

EPIs. The findings of the pilot study were synthesised with the literature review and used in the development of the formal research theory and model. Six hypotheses were developed for the formal research theory. They were tested and further explored in the main study.

#### *1.3.6 Chapter 7 - Research Method*

The research method for the main study was developed from the literature and enhanced by the experience of the pilot study. A combination of the positivist paradigm and the phenomenological paradigm was used to objectively establish evidence to test the hypotheses in the formal research theory and to subjectively explore any statistical correlations for causation. The Hong Kong Police Force provided the case study with samples from land-based police districts being researched using a questionnaire and semi-structured interviews. The questionnaire was grounded in the literature and developed in line with the synthesis of the literature review and pilot study. The quantitative results were analysed statistically whilst the qualitative findings were analysed through concept mapping. The synthesis of results and findings provide methodological triangulation thus increasing the reliability and validity of the research.

#### *1.3.7 Chapter 8 - Results*

The chapter of results covers the quantitative results and statistical analysis from the questionnaire and the qualitative findings from the semi-structured interviews. The results and analysis used to test the operational hypotheses are presented in tables with brief descriptions. The interview findings are summarised as a series of poignant quotes from the transcripts to represent supporting evidence for the questionnaire findings and also to highlight exploratory findings outside of the formal research theory. The results are synthesised and a summary table of research findings is presented.

#### *1.3.8 Chapter 9 - Discussion, Conclusions and Proposals for Further Research*

The final chapter discusses the formal research theory and the contributions made in the development of the formal research model. The results are further explored to answer the research question by referring to the different EPIs researched and an enhanced

research theory is described. Conclusions are presented and implications of the study for the subject case are discussed. Finally, the research study is evaluated and proposals are made for further research.

#### **1.4 Summary**

This thesis presents new exploratory research into how extrinsic performance incentives (EPIs) affect the alignment between frontline police performance and police strategy. The literature review suggests that there are a number of contrasting theories relating to the effects of EPIs on individual performance and organisational alignment. Whilst EPIs are promoted as being an effective tool with which to align frontline performance with organisational strategy, much of the evidence suggests that the realised effects may not be as intended (Mintzberg, 1978).

The researcher has formulated, tested and explored a formal research theory using a rigorous literature review, an exploratory pilot study and a main study comprising quantitative and qualitative research methods. The findings of the research have confirmed the value of the research model, and provided valuable insights into the effects of extrinsic performance incentives on the alignment between frontline police performance and police strategy.

## CHAPTER 2

### LITERATURE ON ORGANISATIONAL ALIGNMENT

#### 2.1 Introduction

There are two major challenges in strategic management. The first is in aligning the strategy of an organisation with the operating environment, often referred to as external alignment. The second is in aligning the resources and activities of an organisation with the strategy - internal or *organisational alignment* (Miles and Snow, 1978; Venkatraman and Camillus, 1984).

In this chapter, the literature on the topic of organisational alignment is reviewed. For the purpose of this research:

*Organisational alignment is the alignment between the intended strategy and the internal characteristics and activities of the organisation.*

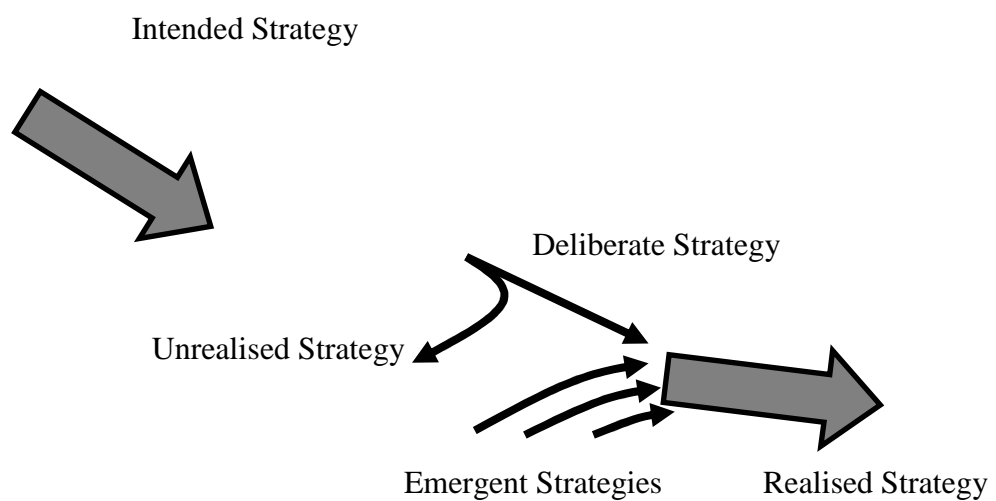
(based on Venkatraman and Camillus, 1984).

The first section of this chapter introduces the concept of organisational alignment in terms of some of the seminal works on strategy by Henry Mintzberg and his colleagues. The subsequent sections review the literature specific to organisational alignment from a wider range of academic fields including those of strategic management, operations management and human resources management. Apart from reviewing the relevant literature, the aim of this chapter is to set the scope of organisational alignment for this research study.

#### 2.2 Strategy and Organisational Alignment

There has been much disagreement in the literature on the definition and meaning of strategy. Mintzberg and Waters (1985) identify two kinds of strategy; *intended* and *realised*. Intended strategies are the “*deliberate conscious set of guidelines that determine decisions in the future*”, often articulated in written plans and job

descriptions, whilst realised strategies are what the organisation actually does in terms of “*a pattern in a stream of decisions*”, or “*patterns in a stream of actions*”, including on the frontline (Mintzberg and Waters, 1985). Mintzberg goes on to define *deliberate strategies* as “*intended strategies that get realised*” and *emergent strategies* as “*realised strategies that were never intended*”. Such strategies may emerge because either there was no top-down intended strategy yet activities and decisions were required, or the intended strategy became displaced at some point. Intended strategies that do not get realised are referred to as *unrealised strategies*. Mintzberg's model is represented at figure 2.1.



*Figure 2.1 - Types of Strategies*

*Using Mintzberg (1978); Mintzberg et al. (2002)*

Whilst Mintzberg’s definition of emergent strategies as *never intended* fails to fully capture the concept of a deliberate strategy that includes organisational learning, in which *bottom-up* innovations that lead to the development of tactics and strategies are encouraged as a part of a strategy for continuous improvement (Simons, 2000), his explanation of types of strategy (Mintzberg, 1978) is a seminal work and provides an excellent model when used to present the concept of organisational alignment. Chaffee (1985) supplements the concept with the introduction of three models of strategy. *Linear* strategy relates to the deliberately planned actions, *adaptive* strategy relates to innovation and *interpretive* strategy relates to the contextual behaviour of members of an organisation.

## 2.3 Organisational Alignment

Organisational alignment has been a part of the literature on strategic management for many years. The early strategic planning literature established the need for a review of the firm to appraise the fit between the internal systems and the corporate mission, and between the corporate mission and the external environment (Ansoff, 1965). Hamel and Prahalad (1989) state that:

*“.... nearly every corporate planning system is premised on a hierarchy in which corporate goals guide business unit strategies and business unit strategies guide functional tactics.”*

(Hamel and Prahalad, 1989, p.75)

Porter (1996) uses the term *fit*: “*The importance of fit among functional policies is one of the oldest ideas in strategy*” (p.70), yet the term *alignment* has been appearing more frequently in the literature of recent years (e.g. Labovitz and Rosansky, 1997; Kaplan and Norton, 2006).

Kaplan and Norton (2006) identify organisational alignment as one of five key management processes that are important for successful strategy implementation. Bradach (1996) asserts that a high degree of internal alignment is necessary for an organisation to be effective, and Porter (1996) indicates that operational effectiveness through internal fit is “*essential for superior performance*”. From another perspective, poor organisational alignment is considered to be detrimental to an organisation and can lead to dysfunction and sub-optimal performance (Sussland, 2003).

Whilst there is considerable anecdotal support for the benefits of organisational alignment, empirical evidence is limited and few studies have conclusively established a clear performance advantage for good organisational alignment (Powell, 1992; Joshi *et al.*, 2003). Furthermore, some researchers have noted that organisations that focus on intended strategies that are not aligned with the external environment are unlikely to perform well even with perfect internal organisational



alignment (Bradach, 1996). Assessments of the effectiveness of organisational alignment will become distorted when internally aligned organisations are pursuing a *lost cause* (Boswell *et al.*, 2006).

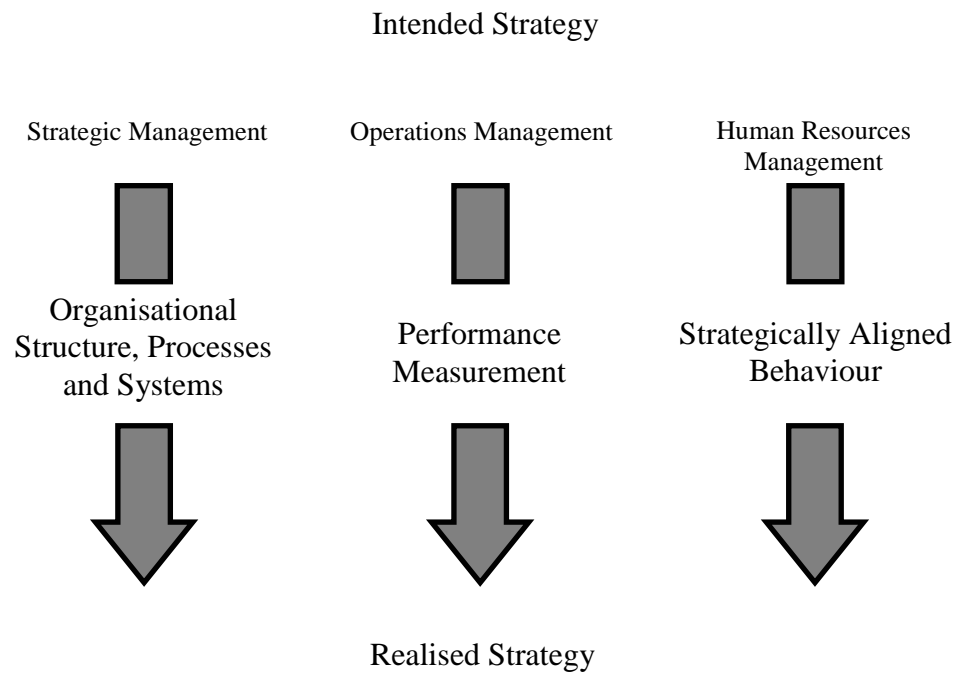
## 2.4 **Vertical and Horizontal Alignment**

Organisational alignment can be considered in terms of *vertical alignment* and *horizontal alignment* (Labovitz and Rosansky, 1997). Vertical alignment describes the alignment through the organisation from the intended strategy of the top management to the realised strategy in terms of the characteristics and activities of the frontline. Anthony (1965) proposes three levels of vertical alignment: *strategic planning, management control and operational control*. Similarly, Miles and Snow (1978) present five types of organisational adjustment including external alignment, suggesting four levels of internal organisational alignment: *inter-departmental structure and process adjustments, intra-departmental structure and process adjustments, work group adjustments and procedural adjustments*. Simons (2000) links strategy to actions through the chain of *intended strategy, goals and plans*, and *performance measures*. More recent literature has tended to correspond to three levels of vertical alignment, corporate level strategy, functional or business strategy, and frontline tactics, activities and behaviour (Papke-Shields and Malhotra, 2001; Colvin and Boswell, 2007).

Horizontal alignment describes the coordination and creation of synergies of characteristics and activities across the organisation between the various functional departments and processes. Kaplan and Norton (2006) use the elements of their *Balanced Scorecard* to classify horizontal alignment under four headings: *financial, customer, internal processes*, and *learning and growth*. Labovitz and Rosansky (1997) focus on two aspects for horizontal alignment, *processes* and *customers*. In their model of organisational alignment, Tosti and Jackson (1994) separate what needs to be done - *strategy* - from how things are done - *culture*.

## 2.5 Approaches to Organisational Alignment in the Literature

Organisational alignment is a topic in several fields of research. Papke-Shields and Malholtra (2001) introduce the three main approaches used to describe organisational alignment in the literature.



*Figure 2.2 - Types of Organisational Alignment*

In the business and strategic management literature, organisational alignment is presented as an holistic consistency of characteristics of fit between strategy and operations, including structure, strategy, systems and processes (e.g. Bradach, 1996). This differs slightly from the approach adopted in much of the operations management literature, in which organisational alignment is described in terms of the clear links between the strategic control and performance measurement systems and the strategy (e.g. Kaplan and Norton, 1992; 2006). In a third branch, the human resources management literature, organisational alignment is presented as the degree of understanding and consensus between different levels of management on the organisation's strategy and priorities, and the degree of strategically aligned behaviour of frontline workers (van Riel *et al.*, 2007). Figure 2.2 shows the three main accounts of organisational alignment in the respective branches of literature.

## 2.6 Organisational Alignment as Aligning Structure, Processes and Systems

In simple terms, organisational alignment is “*the realization of an organization's strategic objectives is through individuals and their behaviour*” (Colvin and Boswell, 2007), however, the business and strategic management literature considers all of the various aspects of an organisation and presents them as a complex system of interdependent functions. The correct alignment and synergy of these functions are considered to be *crucial for success* (Beer *et al.*, 2005).

Bradach (1996) presents the 7-S framework for alignment, which was jointly developed by consultants and professors in the 1980's. The framework describes seven interdependent aspects of an organisation: *strategy, structure, systems, shared values, style of management, skills and staff*. Strategy, structure and systems represent the *hard* aspects of an organisation and largely relate to the traditional approach to strategic management (Miles and Snow, 1978). Shared values, style of management, skills and staff relate to *soft* aspects (Beer *et al.*, 2005), which are more often addressed in the field of human resources management. When all seven aspects are in co-alignment and optimally reinforcing, and the strategy is correctly aligned to the operating environment, then the organisation will perform at its potential (Bradach, 1996; Porter, 1996).

There are many similar models of organisational alignment in the literature. Campbell and Yeung (1991) present the Ashridge Mission Model, which details four key elements of achieving a mission that should be aligned, namely: *purpose, strategy, values, and policies and behavioural standards*. Lockamy and Smith (1997) use a three way model of strategy, process and customers. Schneider *et al.*, (2003) use a five way *star alignment* of strategy, teamwork, training and development, goals and rewards, and people. Tosti and Jackson (1994) present a model of organisational alignment with two main tracks between the organisation's mission (vision) and organisational results. The first track follows the business strategy with *goals, objectives and activities*. The second track follows the organisation's culture with *values, practices and behaviours*. Dickson *et al.* (2006) considers *strategic factors, staffing factors and systems factors* in his research on organisational alignment.

A general observation of the literature on strategic management is that the behaviour of frontline staff is often considered secondary in the planning and implementation of intended strategies and in the processes of organisational alignment. Apart from a few notable exceptions, (e.g. Simons, 2000; Roberts and MacLennan, 2003), research tends to focus on the relationship between organisational alignment and organisational performance rather than frontline performance (Kathuria *et al.*, 2007). Many authors present compelling theories and practices for strategy formulation, implementation and alignment without sufficiently addressing the soft aspects of organisational alignment.

The complexity of the strategic management view of organisational alignment means that it is difficult to establish empirical evidence for the processes of achieving alignment. Each element of alignment is interdependent and hence a *dyadic* approach to vertical and horizontal alignment may not adequately address all aspects of organisational alignment (Kathuria *et al.*, 2007).

## **2.7 Organisational Alignment as Aligning Performance Measures**

The literature from the operations management field largely presents organisational alignment in terms of strategic control and performance measurement. Organisational strategy is translated into key performance measures or indicators. These are cascaded vertically and horizontally throughout an organisation to facilitate the processes of aligning various aspects of the organisation and to indicate the state of alignment. The aim of this approach is to translate strategy into results by gauging the performance of a number of aspects of an organisation and then making appropriate adjustments such that the realised strategy is aligned with the intended strategy (Ittner *et al.*, 2003).

Strategic control and performance measurement systems are designed to present a broad range of management information covering various aspects of the organisation (Chenhall, 2005). There are several well-known examples including *Strategy Maps* and the Balanced Scorecard (Kaplan and Norton, 1992; 2006), self-assessment models such as the Baldrige Award and the European Foundation of Quality Management Excellence Model (EFQM), dynamic performance measurement systems and integrated performance measurement (Ghalayini *et al.*, 1997; Bititci *et al.*, 2000; Ittner *et al.*, 2003). In many of these models, key performance indicators are identified from critical

success factors that have been defined at the corporate level. These indicators are cascaded through the organisation to the frontline as some form of activity performance indicator (Roberts and MacLennan, 2003).

Strategic control and performance management systems can be used diagnostically, like a sort of managerial *autopilot* directly controlling the alignment process, or they may be used interactively, by providing information to managers that is then used to guide the selection of an appropriate course of action to achieve alignment (Simons, 2000). The diagnostic use of performance measurement involves setting performance targets and aligning performance measures and the incentive systems, including EPIs, with those targets (Simons, 2000). In an application of the diagnostic approach, Labovitz and Rosansky (1997) propose that *self-alignment* can be achieved in an organisation through an *invisible hand* linking performance measures to extrinsic incentives such as rewards and recognition. Neely (1999) promotes the use of control systems for the direct manipulation or induction of behaviour, suggesting that performance measures can help to communicate and encourage the implementation of the strategy and influence behaviour.

Interactive controls systems, on the other hand, are the:

*“.... formal information systems that managers use to personally involve themselves in the decision activities of subordinates.”*

(Simons, 2000, p.216)

The evidence suggests that there are several pitfalls in the operations management approach to organisational alignment due to unintended and dysfunctional consequences of performance measurement, in particular with the diagnostic approach. Bouckaert and Balk (1991) describe 13 *diseases* in performance measurement systems in the public sector, Smith (1995) describes eight unintended consequences of performance measurement, and Perrin (1998) describes eight problems and limitations of performance indicators. Dysfunctional behaviour caused by performance measurement includes gaming, deliberate underperformance, over fixation on quantitative measures and misrepresentation or fraudulent performance recording

(Smith, 1995). Van Thiel and Leeuw (2002) suggest that in the past five to 10 years, performance measurement has led to increased costs in monitoring organisations, increased potential for dysfunctional effects, false representation that monitoring is in place, and unclear definitions of measures. Kaplan and Norton (2006) suggest that in a number of cases the implementation of a Balanced Scorecard system has failed due to the inappropriate linking of extrinsic incentives to performance measures without considering the need to harness intrinsic motivation.

Atkinson *et al.* (1997) state that by focusing on results, the organisation becomes reactive rather than proactive; hence performance measurement should be used in coordinating, monitoring and diagnostic<sup>1</sup> roles. Smith (1993) places particular emphasis on the use of performance indicators as part of a total system of control rather than a control mechanism. Hofstede (1981) argues that cybernetic controls in performance measurement are only applicable in circumstances where activities are unambiguous, outputs are measurable, there exists perfect knowledge of what actions to take, and the activity is repetitive.

Whilst there are several studies relating aligned performance measures with organisational performance, there have been few empirical research studies relating to the organisational alignment of performance measures and the effect on frontline employees' strategically aligned behaviour.

Decoene and Bruggeman (2006) attempt to link organisational alignment to extrinsic and intrinsic motivation of employees and subsequently to organisational performance by proposing that increasing organisational alignment will have a positive effect on organisational performance by raising intrinsic motivation, which subsequently has a positive effect on frontline performance. Furthermore, alignment combined with a compensation plan linked to performance measures will increase extrinsic motivation, which will also have a positive effect on frontline performance. In arriving at their propositions, the authors draw upon stewardship theory, agency theory and expectancy theory. In their case study, the researchers discovered that intrinsic motivation was negatively affected by linking incentives to performance measures. They concluded that this was due to the absence of alignment between the corporate strategy and the

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<sup>1</sup> Atkinson *et al.* (1997) use the term *diagnostic* in a context similar to the use of the term *interactive* by Simons (2000).

functional strategy in the case researched, yet the dysfunctional effect of EPIs on intrinsic motivation through crowding out (Frey and Jegen, 2001) provides a viable alternative explanation.

Pongatichat and Johnson (2008) found that in a public sector setting, strategic performance measures could not capture all of the aspects required of frontline performance and that a certain degree of misalignment was functional, including balancing strategic focus with broader requirements, aiding organisational learning, creating flexibility and enabling greater control over activities. Performance measures have several purposes, including communicating to multiple principals as well as members of the public and as such, internal strategic measures may not always be the most appropriate measures. Maintaining a balance of aligned and misaligned performance measures meant that conceptual aspects of performance such as morality could be sufficiently monitored.

Verweire and Van den Berghe (2004) note that achieving organisational alignment by integrating a performance measurement system is not a simple process of cascading measurements. The information requirements at the corporate level differ from the business unit level and the functional level. Whilst financial indicators and the Balanced Scorecard method may be suitable for the top-down performance measurement of business units, at the frontline such measurement might be considered irrelevant and a self-assessment method might be more suitable. The use of these subjective indicators of alignment is of interest because it suggests that, even in *production organisations*, where outputs and outcomes are largely observable, quantitative measurement and scorecards are not sufficient to describe alignment. With *coping agencies*, such as many public sector organisations, in which outcomes and outputs are difficult to assign cause and effect, and outputs are difficult to measure, it is reasonable to argue that organisational alignment is best measured subjectively (Wilson, 1989).

In some of the manufacturing operations literature, organisational alignment has been presented as the extent to which the intended strategy was formulated and pursued, the alignment of resource allocations with strategy (Chenhall, 2005), and the degree of strategy consensus and the perceptions of priorities between general managers and manufacturing managers (Papke-Shields and Malholtra, 2001; Joshi *et al.*, 2003;

Chenhall, 2005). These approaches to organisational alignment have many similarities with the approach adopted in the human resources management literature.

## **2.8 Organisational Alignment as Aligning Frontline Behaviour with Strategy**

The third track of literature on organisational alignment is in the field of human resources management and is largely overlooked by the strategic management and, to a lesser extent, by the operations management literature. Ultimately the problem of alignment is considered to be the agency problem of aligning the realised strategy, in the form of the activities and behaviour of frontline agents, with the organisation's intended strategy, that is, the principal's aim (Jensen and Meckling, 1976; Eisenhardt, 1989a). For frontline staff to act and behave in a manner that is aligned with the intended strategy they must be both competent and motivated to carry out their role. Furthermore, if they need to exercise any discretion, they must know how their activities and behaviour contribute to the organisational strategy.

A clearly articulated mission statement has become one of the foundation stones for many organisations to align frontline employees with the organisation's intended strategy. Bart *et al.*, (2001) conducted a series of studies attempting to relate the content of mission statements to organisational and frontline performance. It was established that whilst financial performance had no significant relationship, other non-financial performance measures had significant positive relationships with the content of mission statements, including the alignment of the behaviour of frontline staff. An employee's commitment to the organisation's mission, rather than job satisfaction, had the greatest correlation with aligned behaviour. Correspondingly, aligned employee behaviour was found to have a significant positive effect on an organisation's performance.

Recent studies have considered wider managerial efforts to align the behaviour of frontline staff with the intended strategy. Colvin and Boswell (2007) introduce the concepts of *action* and *interest* alignment which, in effect, describe the “*arousal, direction and persistence of behaviour*” of frontline staff (Ilgen and Klein, 1988). Action alignment refers to aligning the actions of frontline staff with the organisational strategy by establishing a clear understanding of their role and by developing their



appreciation, or *line of sight* (Boswell *et al.*, 2001), of how that role contributes to the organisational strategy. Here, the term *role* goes beyond that specified in a job description and encompasses not just *what* is to be done, but *how* it is done. In order to achieve action alignment, it is necessary for frontline staff to have *capability*, *opportunity* and *motivation* (Bailey, 1993, cited in Colvin and Boswell, 2007). Interest alignment is an application of agency theory and refers to aligning the extrinsic and intrinsic interests of frontline staff with the organisation's intended strategy through the use of EPIs in balance with other intrinsic motivational factors and through the adoption of the concept of *total compensation* (Colvin and Boswell, 2007).

Action alignment and interest alignment are somewhat related to the concepts of *task performance* and *contextual performance* (Van Scotter *et al.*, 2000) and with *adaptive performance* (Pulakos *et al.*, 2000), in that they consider different perspectives of frontline work performance. Task performance considers those activities that might be contained within a job description. They relate to core organisational activities that either directly, as a part of the value chain, or indirectly, as part of the supporting services contribute to the organisational performance (Motowidlo, 2000). Contextual performance involves the social and psychological behaviour in the way that task activities are undertaken. Contextual activities might range from supporting a supervisor to helping a colleague complete his task or volunteering for additional duty (Van Scotter *et al.*, 2000). Adaptive performance is a relatively new addition to the constructs of individual performance and relates to the ability to adapt to new and changing work performance requirements (Pulakos *et al.*, 2000). The literature relating to task, contextual and adaptive performance is covered in chapter three of this thesis.

In another recent study, van Reil *et al.* (2007) conducted research on three large organisations to consider the relationship between the *strategically aligned behaviour* of frontline staff and the influence of capability, opportunity and motivation in the form of managerial efforts and information. The constructs used for strategically aligned behaviour were based on the concept of organisational citizenship behaviour (OCB), which is considered to be one of the main constructs of contextual performance (Colman and Borman, 2000). The authors were able to demonstrate that strategically aligned behaviour was enhanced by managerial efforts in motivation and by providing capabilities, whilst in one of the organisations, informing the frontline staff about their role in the strategy also contributed to aligned behaviour. Of all the managerial efforts,

openness was considered the most effective of the motivational efforts. Beehr *et al.*, (2009) found that communication about organisational goals, managerial effectiveness and *employee enhancement*, including opportunities for development, teamwork and organisational citizenship behaviour, were major antecedents of organisational alignment at the frontline sub-unit level.

There have been relatively few studies that have been able to establish tangible benefits of aligning frontline behaviour with the organisation's strategy, as this area of research appears relatively recently in the literature. In one of the first known empirical studies of its kind, Gagnon and Michael (2003) conducted research into the organisational alignment of employees in a wood products manufacturer using the general constructs of activity and interest alignment to assess organisational alignment. Strategically aligned actions, and macro and micro strategic knowledge were tested for correlation with individual performance, psychological outcomes and archival data relating to the organisational strategy and other relevant characteristics of the organisation. The research, which was exploratory, indicated that a high degree of action alignment may enhance the *strategic adoption* process and improve competitiveness but where alignment is poor there is a higher incidence of undesirable work behaviour and attitudes. In a further study of the same field, Gagnon *et al.* (2008) found that with the required knowledge, the work behaviours of strategically committed individuals are generally aligned with the organisational strategy.

Within the literature on organisational alignment, few studies have considered the relationship between organisational alignment and organisational performance in terms of economic performance. Bouillon *et al.*, (2006) considers the effect of managers' goal congruence, which is the managers' acceptance of, and agreement with the organisation's intended strategy, with economic benefits in the hospital industry. The results of the study indicated that economic benefits could be realised where managers displayed stewardship behaviour (Davis *et al.*, 1997) and goal congruence.

In terms of individual performance, Dickson *et al.* (2006) conducted a study of organisational alignment in the field of hospitality management by measuring a combination of task performance, which is managers' performance in their specified roles, and contextual behaviour - their organisational commitment and job and organisational satisfaction. The authors' conclusions indicate that alignment can be

achieved through three managerial actions: by providing information and monitoring the intended strategy, by enabling capability through empowerment and training, and by minimising the emphasis on disciplinary measures to correct frontline behaviour.

There is also a limited literature base relating to the links between EPIs and organisational alignment. Hanna *et al.* (2000) used a model linking strategic and operational variables with frontline *work style behaviours* and *defensive behaviours* (work avoidance behaviours), in a case study of an engineering company. Initial findings suggested that the alignment and magnitude of behaviour were strongly influenced by correctly aligned rewards, targets and purpose. The study also reinforced the point that companies can fail if external fit or alignment is poor despite having apparently strong organisational alignment with aligned behaviour on the frontline.

One further perspective of organisational alignment from the human resources management literature involves the alignment of frontline behaviour with organisational values. Tosti and Jackson's (1994) two forms of alignment from “*mission and vision*” to “*activities and behaviour*” include a link from intended organisational values, through practices to frontline behaviour. This link represents the need to align organisational culture with the intended strategy. Williams (2002) logs the resurfacing of values in strategic planning and comments that shared values amongst the employees of an organisation are a *scarce and critical resource*.

The three tracks of literature covered in this review each approach organisational alignment from different perspectives. However, whatever the approach, measuring and achieving organisational alignment continues to be a considerable challenge. The next section considers the literature on how the condition of organisational alignment is achieved and assessed.

## **2.9 Achieving Organisational Alignment**

Porter (1996) suggests three orders of organisational alignment that indicate the degree to which fit is optimised. In the first order, activities are consistent with the intended

strategy but are not reinforcing across horizontal functions. In the second order, activities are reinforcing and in the third order, this reinforcement is optimised.

It is intuitively appealing for an organisation to strive for third order alignment, however, the greater the optimisation, the greater the risk that internal alignment is achieved at the expense of flexibility to respond and eventually, external alignment may be compromised. Hence, some degree of misalignment may be optimal to ensure that the structure does not begin to drive the strategy because of insufficient adaptability to change (Chandler, 1962). Kaplan and Norton (2006) caution against searching for the best structure for the strategy and recommend accepting a *reasonable* structure as long as there are *no major conflicts*.

Miles and Snow (1978) present three perspectives on how an organisation can adapt to achieve alignment. Evolutionary theory suggests that organisations with the *right* structure and processes at the right time will survive where others fail. Contingency theory asserts that alignment is achieved through the planning and implementation of changes in the organisation to maintain *equilibrium with the environment* (Miles and Snow, 1978; Powell, 1992). Strategic choice theory considers alignment to be a two-way process of the environment shaping the organisation and the organisation shaping the environment (Miles and Snow, 1978). These approaches are consistent with the concept that structure both follows and precedes strategy in a continual and dynamic process (Chandler, 1962; Labovitz and Rosansky, 1997).

## **2.10 Summary**

This chapter of the thesis has dealt with organisational alignment, which is a core subject area in the research question. In considering how EPIs affect the alignment between frontline police performance and police strategy it has been necessary to focus on the different approaches to framing organisational alignment, and hence this review has drawn on the literature from strategic management, operations management and human resources management.

In this research, organisational alignment is about aligning the realised strategy, in terms of frontline police performance, with the intended police strategy (Ansoff, 1965;

Miles and Snow, 1978; Porter, 1996). As such, the human resources management approach to organisational is adopted for the research, whilst the strategic management and operations management approaches will be considered throughout the research.

The next chapter introduces the literature relating to frontline performance, concentrating on the particular constructs of individual human performance used in this research.

## CHAPTER 3

### LITERATURE ON INDIVIDUAL PERFORMANCE

The previous chapter introduced the literature on organisational alignment, which is the alignment between the intended strategy and the internal characteristics and activities of the organisation (Venkatraman and Camillus, 1984). One such set of internal characteristics and activities relevant to the research question is the individual performance of frontline employees.

In this chapter the relevant literature on individual performance is reviewed. After a brief introduction, different perspectives and models of performance are presented, including Campbell's model of job performance (Campbell, 1999) and an integrated performance model (Schmitt *et al.*, 2003). The subsequent two sections will introduce the literature on *task performance* and *contextual performance*, which are well-established aspects of individual performance and form part of the performance model. The next section reviews the literature on *adaptive performance* (Pulakos *et al.*, 2000) which forms the third element of performance in the Schmitt *et al.* (2003) performance model.

#### 3.1 Introduction

The performance of an organisation is often conceptualised as shareholder or stakeholder value and has been operationalised using accounting measures like return on investment, value added and profit. However, in many organisations such representations of performance are not particularly appropriate and in recent years there has been a trend towards measuring a balance of financial and non-financial performance (Ittner and Larcker, 1998; Verweire and Van den Berghe, 2004).

Despite such developments, frontline employees in large organisations still have little control over many aspects of performance that are measured at a strategic level (Campbell *et al.*, 1993). Take, for example, a frontline police officer who diligently patrols his beat area, engaging members of the community and demonstrating a strong authoritative presence. Such activities and behaviour are aimed at preventing crime, which is one of the core duties of the police. Yet on his beat there are one or two rough estates that continue to have a high

crime rate (a strategic and operational performance measure), perhaps due to social conditions and high unemployment in the area. Whilst the officer's individual performance may be outstanding, in such a *coping* situation his outputs are difficult to effectively quantify and the social outcomes do not truly represent his performance at work (Wilson, 1989). Hence, this research into frontline police performance focuses on the concept of *individual performance* (Sonnentag and Frese, 2002).

### 3.2 **Individual Performance**

Individual performance is considered to be an essential requirement for an organisation to deliver high performance and a great deal of attention is paid to maximising frontline performance and conducting performance appraisals (Sonnentag and Frese, 2002). Individual performance is defined as:

An individual's “.... *behaviour or action that is relevant for the organisation's goals and that can be scaled (measured) in terms of the level of proficiency (or contribution to goals) that is represented by a particular action or set of actions.*”

(Campbell, 1999, p.402)

Using this definition of individual performance has the advantage of applying the research to aspects of performance that are in the control of the frontline workers and it avoids the causal issues to do with performance measures such as output, productivity and efficiency (Poropat, 2004). Furthermore, in considering the research topic - the alignment of frontline performance with organisational strategy - this definition is particularly fitting.

### 3.3 **Perspectives on Individual Performance**

There are three different broad perspectives on individual performance: the *individual differences perspective*, the *situational perspective* and the *performance regulation perspective* (Sonnentag and Frese, 2002). The individual differences perspective relates performance to the characteristics of the individual, such as training, knowledge,

experience, ability and motivation (Podsakoff *et al.*, 2000). The individual differences perspective asks the question, “*what are the characteristics of individuals that perform best?*” (Sonnentag and Frese, 2002). Using this perspective, performance is a positive or negative behaviour that makes a difference to the organisation. Hence, outcomes due to individual behaviour that have no impact on the organisation are not considered as a part of individual performance. Furthermore, performance is presented as multiple dimensions of individual behaviour and with varying extents of contribution to the organisation. Overall, individual performance is the “*aggregated value to the organisation*” of each of these dimensions of performance (Motowidlo and Schmit, 1999; Sonnentag and Frese, 2002).

The situational perspective of individual performance considers the effects of the working environment on individuals and their performance. The question for this perspective is, “*what are the working conditions in which individuals perform best?*” (Sonnentag and Frese, 2002). Behaviour is influenced by certain job characteristics such as skill variety, task identity, autonomy and feedback that promote or inhibit performance (Hackman and Oldham, 1976) and these characteristics might include motivational factors such as extrinsic performance incentives (EPIs) or workplace equity. Empirical evidence suggests that there is a slight positive correlation between job characteristics and performance, but without significant support for the suggestion that role ambiguity negatively affects job performance (Sonnentag and Frese, 2002).

The performance regulation perspective considers performance in terms of the actual processes that are occurring within a person that determine performance. “*What is happening inside the individual that makes him perform?*” (Sonnentag and Frese, 2002). Through this perspective, the individual's approach to planning and problem solving are related to performance. High performers generally work with a broader view of their role and are more able to integrate the various aspects of a task than do moderate performers (Sonnentag and Frese, 2002).

In researching the effects of EPIs on frontline performance, all three perspectives on individual performance are relevant. Firstly, it is important to acknowledge that individuals have different characteristics and competencies, and that each person will place their own value on EPIs and respond to receiving extrinsic rewards in a different



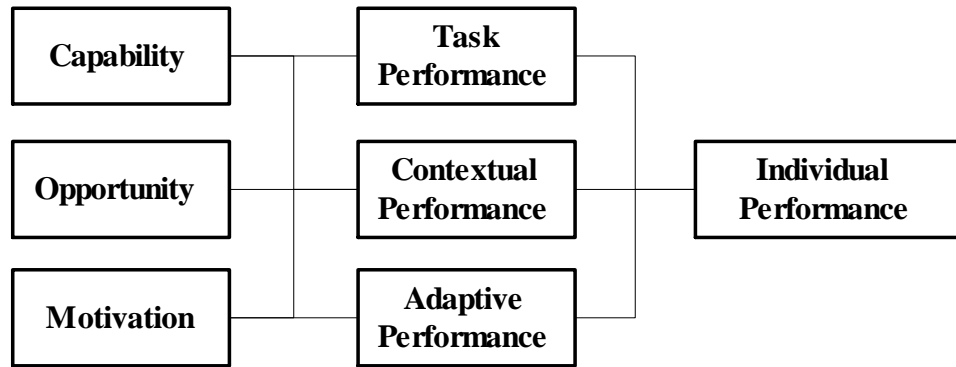
way. Secondly, performance due to intrinsic working conditions must be separated from the effects of EPIs. Thirdly, the regulation perspective extends to the processes of motivation within an individual which are relevant when considering the effect of EPIs on the behaviour of frontline workers.

There have been many attempts to develop a general model of job performance and Viswesvaran and Ones (2000) present an excellent summary. The two models that are apparently most represented in the literature are Campbell's (1993; 1999) and Borman and Motowidlo's (1993).

Campbell and others (Campbell *et al.*, 1993; Campbell, 1999) use a general latent model of performance, based on individual differences, with three hierarchical levels, *performance components*, *direct determinants of components of job performance* and *indirect components of job performance or predictors* (Sonnentag and Frese, 2002). In Campbell's model, there are eight performance components representing the highest level factors for describing the performance of individuals: *job-specific task proficiency*, *non-job-specific task proficiency*, *written and oral communication*, *demonstrating effort*, *maintaining personal discipline*, *facilitating peer and team performance*, *supervision/leadership*, and *management/administration*. The direct determinants of performance are described as: *declarative knowledge* (DK) such as facts, principles, goals and self-knowledge, *procedural knowledge* and skills (PKS), such as cognitive skills, physical skill and interpersonal skill, and *motivation* (M). These determinants correlate to the factors influencing behavioural outcomes in action alignment, that is, capability, opportunity and motivation (Colvin and Boswell, 2007). Indirect components of job performance include ability, personality, interests, education, training, experience, and *aptitude-treatment interventions*. Motivation is considered a dependent variable to EPIs and an independent variable of performance. As Campbell (1999) has clarified, performance must be within an individual's influence, hence *opportunity* can arguably be disregarded and *capability* can be represented under the constructs of DK and PKS.

Borman and Motowidlo (1993) argue that in-role job behaviours as included in job descriptions, so-called *task performance*, should be distinguished from extra-role behaviours or *contextual performance*.

In an extension of the contrast between task and contextual performance, Schmitt *et al.* (2003) present an integrated performance model in which three main constructs of performance: task performance, contextual performance and adaptive performance. Figure 3.1 presents an integrated model of individual performance based on the literature review and on Schmitt *et al.* (2003).



*Figure 3.1 - Model of Individual Performance*

### **3.4 Task Performance**

The typical layman's view of performance is that of task (or in-role) performance (Borman *et al.*, 2001b). Task performance considers those activities that are normally contained within a job description and have been defined through a rational job analysis. It relates to core organisational activities that contribute to organisational performance either directly, as a part of the value chain, or indirectly, as part of the supporting services (Motowidlo, 2000). In a police setting, direct task behaviours might include patrolling, investigating or responding to emergencies, whereas indirect task behaviours might include planning, providing media briefings, training, procuring equipment and operational support.

For the purpose of this research, the following definition of task performance is adopted:

*“.... the proficiency with which incumbents perform activities that are formally recognised as part of their jobs; activities that contribute to the organisation's technical core either directly as part of its technological process, or indirectly by providing it with needed materials or services.”*

(Borman and Motowidlo, 1993, p.73)

Task performance in core organisational activities is determined by the technical skills of the worker, the task characteristics, the environment and the effort of the worker towards task activities (Bonner and Sprinkle, 2002). In manufacturing organisations, which tend to be mechanistic, task performance is relatively simple to define and measure using quantitative tangible outputs and outcomes. In a relatively stable and mechanistic organisation, it is possible to scientifically derive core activities through a job analysis, task breakdown and job definitions, and task performance measurement can readily be applied (Borman *et al.*, 2001b).

In service organisations, which are more organic, measures tend to be vague and general and they are not easily quantified (Stajkovic and Luthans, 1997). It is more difficult to identify and define the full set of tasks in organic organisations as the situations being dealt with are more flexible and dynamic, and frontline staff are multi-tasked and are required to respond to situations by using their own discretion. Task performance is therefore relatively specific when considering particular roles with each job category carrying a different set of tasks. It is also determined more by individual differences in ability than individual differences in personality (Motowidlo and Schmit, 1999).

In Campbell's performance model (1993), five of the high order performance components are related to task performance, namely: *job-specific task proficiency*, *non-job-specific task proficiency*, *written and oral communication*, *supervision/ leadership*, and *management/administration* (Motowidlo and Van Scotter, 1994). These are relatively general dimensions of task performance but they may or may not be entirely relevant to all jobs and would not be specific enough for this research.

The traditional approaches to task performance measurement include measuring the number of successful and unsuccessful outputs based on clearly and easily defined tasks and behaviours such as keeping good time, and on financial indicators (Guest, 1997). For jobs where the outputs are not easily measured and outcomes are not necessarily determined by individual performance, task performance is rated using subjective assessments, often of the type that are included in performance appraisals. In spite of a broader understanding of the importance of other aspects of performance, many appraisal systems predominantly focus on task performance (Welbourne *et al.*, 1998).

Lehman and Simpson (1992) developed a 22-item self-assessment measure of in-role job behaviour using four different categories. The first category, *positive work behaviours*, includes items such as “*done more work than required*” and “*tried to think of ways to do the job better*”. The second category represents *psychological withdrawal behaviours* and includes “*daydreaming*”, “*spent work time on personal matters*” and “*thought of leaving current job*”. The third category is *physical withdrawal behaviours* such as “*left work early without permission*” and “*taken longer lunch than allowed*”. The final category included *antagonistic work behaviours* such as “*argued with co-workers*” and “*disobeyed supervisor's instructions*”.

Motowidlo and Van Scotter (1994) develop a specific 14 item definition of task performance based on critical dimensions and specific task analysis for Air Force mechanics. In their study, supervisors’ perceptions of the sub-ordinates' effectiveness were given on items such as, “*inspecting*”, “*testing and detecting problems with equipment*”, “*operating equipment*”, and “*cleaning shop facilities*” - tasks that clearly reflect the role of a mechanic. However, such dimensions cannot be generalised and the task performance of a police officer, for example, would need to be defined quite differently from that of a mechanic. Furthermore, the broad range of duties that the police undertake might mean that the task performance of a criminal investigation detective vary from that of a community patrol officer.

In order to deal with this potential issue in measuring task performance, Johnson (2001) developed a task performance scale by assessing common tasks across 10 different job functions in a large telecommunications company. The scale included job-specific dimensions that were particularly related to a job function or common to fewer than half the job functions, non-job specific dimensions that were common to more than half the

job functions, and written and oral communication task proficiency, which are part of the Campbell model (1993).

In their study, Motowidlo and Van Scotter (1994) present strong evidence to suggest that there should be a distinction between task performance and contextual performance as each of these dimensions independently contributes to overall individual performance. Borman and Motowidlo (1997) present three differences between task and contextual performance. Contextual performance activities are consistent across various jobs within an organisation, whereas task performance activities are job specific. Contextual performance is related to personality and motivation, whereas task performance relates to ability and motivation. Thirdly, contextual performance is discretionary whereas task performance is prescribed.

### **3.5 Contextual Performance**

Contextual performance involves the social and psychological behaviour in the way that task activities are undertaken. Contextual activities might range from supporting a supervisor to helping a colleague complete his task or volunteering for additional duty (Van Scotter *et al.*, 2000). For the purpose of this research, the following definition of contextual performance is adopted:

*“.... contributions to the maintenance and enhancement of the social and psychological context that supports task performance.”*

(Borman and Motowidlo, 1993, p.73)

The support and cooperation of frontline workers and their commitment to helping the organisation outside their prescribed in-role tasks are essential ingredients in the performance of many organisations. Such extra-role behaviour began to gain prominence as a field of research after Bateman and Organ (1983) introduced the concept of *organisational citizenship behaviour* (OCB) and by the turn of the century, there were more than 170 publications on OCB or related subjects (Podsakoff *et al.*, 2000). In recent years, contextual performance and citizenship performance have arguably become more prominent as they consider a more complete set of constructs

relating to extra-role performance. This section will describe the various constructs of contextual performance starting with OCB.

### 3.5.1 Organisational Citizenship Behaviour

OCB has been defined as the:

*“.... individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and that in the aggregate promotes the effective functioning of the organization”.*

(Organ, 1988, p.4)

It is not possible to accurately describe generic behaviours where this definition of OCB fits, as the formal reward systems of many organisations are broadly linked to the subjective perceptions of managers and supervisors. Particular OCB activities in one organisation may be rewarded in another. Furthermore, Organ recognised that supervisors take account of such discretionary behaviours in their performance ratings and promotions, so the definition of OCB was later altered to require only discretionary behaviours that contribute to organisational effectiveness (Viswesvaran and Ones, 2000). In more recent literature, it is indicated that extrinsic incentives have a *significant role* in OCB (Korsgaard *et al.*, 2010).

There are at least 40 different concepts that are similar to OCB (LePine *et al.*, 2002). In a meta-review of the literature, Podsakoff *et al.* (2000) classifies the concepts under seven themes of citizenship behaviour: “(1) *Helping Behavior*, (2) *Sportsmanship*, (3) *Organizational Loyalty*, (4) *Organizational Compliance*, (5) *Individual Initiative*, (6) *Civic Virtue*, and (7) *Self Development*.” The authors considered the studies from the perspectives of four antecedents: *individual characteristics* (individual differences perspective), *task characteristics*, *organisational characteristics* (both relating to the situational perspective) and *leadership behaviour* (performance regulation perspective).

Much of the research into OCB is concerned with theory development and the relationships between individual performance and characteristics of the individual (e.g. Motowidlo, 2000; Borman *et al.*, 2001a; Coole, 2003)

Podsakoff and McKenzie (1997) developed constructs of OCB based on *helping behaviour*, *sportsmanship* and *civic virtue*, in conjunction with 218 work group members of a paper mill and tested work crew performance against OCB. The results suggested that 25.7% of the variance in frontline team performance in terms of quantity and 16.7% in terms of quality could be accounted for with citizenship behaviours. In a meta-study, Whitman *et al.* (2010) found that OCB had a moderately strong relationship with business unit performance. Furthermore, Chow (2009) found that altruism and civic virtue – two constructs of OCB – had significant positive correlations with self-perceptions of job performance.

Williams and Anderson (1991) separated OCB into supporting behaviour towards other individuals (OCBI), such as *helping others*, *taking a personal interest in other employees* and *passing information to co-workers*, and supporting behaviour towards the organisation (OCBO) such as *attendance above the norm*, *protection of organisational property* and *adherence to informal rules*. The literature offers support for the notion that OCBI and OCBO are different constructs (Podsakoff *et al.*, 2009).

Many of the relevant research studies in the literature use task performance measures and contextual performance measures alongside each other to assess overall performance. Johnson's (2001) study attempted to establish the relevance of contextual performance by assessing the weighting placed on the various constructs of task and contextual performance by supervisors in a variety of job families when assessing overall performance. Due to the high number of dimensions of performance being researched, a behavioural summary scale for 28 items was used ranging from negative performance behaviours to positive performance behaviours. His results suggest that indicators of contextual performance have a similar magnitude to those of task performance.

Perhaps the most widely recognised measure of contextual performance is the Borman and Motowidlo model (1993). In determining the constructs of contextual performance,

Coleman and Borman (2000; also Borman and Motowidlo, 1993; Borman *et al.*, 2001a) drew upon research into OCB, prosocial organisational behaviour and the model of soldier effectiveness. The authors used five dimensions for contextual performance: “(1) *persisting with enthusiasm and extra effort as necessary to complete own task activities successfully*; (2) *volunteering to carry out task activities that are not formally part of own job*; (3) *helping and cooperating with others*; (4) *following organizational rules and procedures*; and (5) *endorsing, supporting, and defending organizational objectives*” (Coleman and Borman, 2000, p.27).

### 3.5.2 Prosocial Organisational Behaviour

Prosocial organisational behaviour is closely related to OCB. Numerous types of prosocial behaviour have been identified, including *altruism, helping behaviour, volunteering, working in off hours, attending organisation functions, planning social events and donating money* (Puffer, 1987). Brief and Motowidlo (1986) identified 13 dimensions of prosocial behaviour with various antecedents such as *personality, mood, job satisfaction, organisational context and work environment*. Prosocial organisational behaviour also overlaps with contextual and task behaviour and can be either *role prescribed*, where job descriptions include roles such as helping and supporting colleagues, or *extra-role* (Puffer, 1987).

Prosocial behaviour might be functional and contribute to the organisation, such as when workers cooperate and act in support of the organisation. Alternatively, where individual motives are not aligned with the organisational interest, it might be dysfunctional, for example, where procedures are circumvented to favour an individual but at the expense of the organisation (Puffer, 1987; Coleman and Borman, 2000). Benabou and Tirole (2005) suggest that offering incentives to promote prosocial organisational behaviour sometimes has the unintended consequence of reducing a worker's total performance and may lead to other dysfunctional effects.

### 3.5.3 Model of Soldier Effectiveness

A further concept related to OCB is that of the *model of soldier effectiveness*, which is based on a model of performance developed for the US Army (Borman *et al.*, 2001a).



The aim of the model is to define aspects of performance that are common to a range of jobs that a soldier might perform service-wide. Due to the broad variety of different roles that soldiers have within an Army, soldier effectiveness does not focus on in-role task performance, but on discretionary extra-role behaviour and attitudes. The model has three main constructs; *determination*, with morale and commitment as the determinants; *teamwork*, that combines morale and socialisation; and *allegiance*, combining commitment and socialisation.

Colman and Borman (2000) further developed the concept of contextual performance by conducting a meta-study of the various constructs related to extra-role behaviour and presenting them to panels of experts for interpreting and sorting. As a result of the exercise, the authors were able to develop an integrated model of what they describe as *citizenship performance*. The three broad constructs of citizenship performance are; *personal support*, with sub dimensions of *helping*, *cooperating*, *courtesy* and *motivating*; *organisational support*, with sub dimensions of *representing*, *loyalty* and *compliance*; and *conscientious initiative*, with sub dimensions of *persistence*, *initiative* and *self-development*. As highlighted by Colman and Borman (2000), their integrated model does not represent *civic virtue* particularly well, and a further area that is not fully addressed is that of responsiveness to change, or *adaptive performance*. Arguably both of these aspects are highly relevant in many organisations today (Schmitt *et al.*, 2003).

### **3.6 Adaptive Performance**

Adaptive performance fills a gap in the various performance models exposed by the increasingly dynamic nature of work. In representing adaptability in the workplace, Pulakos *et al.* (2000) developed an eight-dimension construct of adaptive performance. Initially the authors identified six constructs of adaptive performance from the literature and applied them to review the relevance of adaptive performance in more than 1000 critical incidents. As a result of the review process, the six constructs were empirically supported, and a further two identified. The author's eight dimensions of adaptive performance are: "*handling emergencies or crisis situations, handling work stress, solving problems creatively, dealing with uncertain and unpredictable work situations, learning work tasks, technologies, and procedures, demonstrating interpersonal adaptability, demonstrating cultural adaptability, [and]*

*demonstrating physically oriented adaptability*” (Pulakos *et al.*, 2000, p.616). Pulakos *et al.* (2000) further develop a Job Adaptive Inventory (JAI) which can be used as an instrument to determine the specific adaptive performance requirements and to measure individual adaptive performance.

Adaptive performance is a relatively new addition to the family of individual performance constructs and there are few related research studies. Chen *et al.* (2005) experimentally tested for individual and team adaptive performance by considering the transfer process from *training*, in which certain knowledge, skills and self-efficacy beliefs are attained, to *practice*, in which the skills and knowledge are demonstrated in novel situations. The author's research model comprised *training outcomes*, *post-training regulatory processes* and *adaptive performance*. These elements can be interpreted with the same elements as those used in action alignment (Bailey, 1993), that is, capability, opportunity and motivation, where training provides the basis of capability, the experiment provides opportunity, and regulatory processes include intrinsic and extrinsic motivation. The findings of the experiment suggest that adaptive performance is affected by regulatory processes such as motivational interventions.

Despite the lack of broad empirical research on adaptive performance, there is some evidence that its dimensions are considered in the rating of individual performance and reward decisions and there is a convincing case for including adaptive performance in an overall construct of individual performance (Schmitt *et al.*, 2003). Hesketh and Neal (1999) assert that adaptive performance can be separated from task and contextual performance and their studies suggest that each of the three dimensions can be defined by different constructs.

There have been some reservations about adaptive performance as part of the performance construct, primarily regarding the inclusion of the act of acquiring skills in the concept of performance, rather than as a precursor to performance (Sonnentag and Frese, 2002). However, the Pulakos *et al.* (2000) constructs are more concerned with adaptability in problem solving and dealing with uncertainties whilst performing a task and not solely adaptive performance through formal learning.

### 3.7 **Summary**

This chapter of the thesis has introduced the concept of individual performance. This is the selected area of performance being considered in the research question and it is used to represent frontline police performance.

In order to achieve alignment between frontline police performance and police strategy, all aspects of individual performance must be aligned with the organisational strategy. The research investigates the effect of EPIs on individuals' performance in terms of organisational alignment.

To assess the effect of EPIs, individual performance is viewed from three perspectives; the individual differences perspective, the situational perspective and the performance regulation perspective (Sonnentag and Frese, 2002). Each of these perspectives is affected by motivation, and it is this element of the model of individual performance that has been investigated in this research. In order to capture the alignment of individual performance in the context of the organisational strategy, the relevant constructs of the three main aspects of performance have been considered; task performance, contextual performance and adaptive performance (Schmitt *et al.*, 2003).

The next chapter of the thesis will introduce the literature on EPIs, with particular focus on the types of incentives available for use by police organisations.

## CHAPTER 4

### LITERATURE ON EXTRINSIC PERFORMANCE INCENTIVES

The previous two chapters of this thesis have presented the literature on organisational alignment and individual performance. This chapter focuses on the literature on extrinsic performance incentives (EPIs) and the effects they have on the motivation and behaviour of frontline employees, which in turn affects individual performance. The main aim of this chapter is to present the theories and empirical evidence relating to EPIs that are used to develop the basic theory in the next chapter.

#### 4.1 Introduction

The potential to use performance related rewards and incentives in implementing an organisation's intended strategy has long been recognised in the strategic management literature (Stonich, 1981). Yet, there is a growing body of evidence to suggest that EPIs might have an adverse effect on intrinsic motivation and that any positive effects on extrinsic motivation are short-lived. Some researchers have contested that, in a public sector setting, it is dysfunctional to use performance related rewards to align individual performance with organisational strategy (e.g. Kohn, 1993; Deci *et al.*, 1999; Kelman and Friedman, 2007). Such notions are pivotal to this research because the commonly accepted and applied assumptions of major theories such as agency theory are being brought into question, and the very incentives used to align frontline performance with organisational strategy are potentially having the opposite unintended consequence.

Section 4.2 of this chapter introduces the concepts of intrinsic and extrinsic motivation. The next sections give a background on agency and stewardship theory and present a comparison between the two theories from the perspective of performance regulation. Sections 4.6 and 4.7 present brief introductions to general interest theory and crowding out theory. The subsequent section defines and introduces the broad categories of EPIs and research findings from the literature on the effects of EPIs are presented. Finally, effort-reward imbalance (ERI) is introduced as a concept for exploration in this research.

## 4.2 Intrinsic and Extrinsic Motivation

Motivation is often thought of as a single dimension, yet, there are many facets of motivation including *amount* and *orientation* (Ryan and Deci, 2000). A basic classification of orientation of motivation is between *intrinsic motivation* and *extrinsic motivation*.

Intrinsic motivation is a behavioural attitude towards an activity that is positive without the provision of an apparent external reward (Kanfer, 1994). Ryan and Deci (2000) define intrinsic motivation as:

*“.... the doing of an activity for its inherent satisfactions rather than for some separable consequence. When intrinsically motivated a person is moved to act for the fun or challenge entailed rather than because of external prods, pressures, or rewards.”*

(Ryan and Deci, 2000, p.56)

Conversely, extrinsic motivation is a behavioural attitude that is positive towards an activity due to an apparent external influence. Satisfaction is generated by fulfilling some external need other than conducting the task itself. Gagné and Deci (2005) describe extrinsic motivation as:

*“Extrinsic motivation, in contrast [to intrinsic motivation], requires an instrumentality between the activity and some separable consequences such as tangible or verbal rewards, so satisfaction comes not from the activity itself but rather from the extrinsic consequences to which the activity leads.”*

(Gagné and Deci, 2005, p.331)

Intrinsic motivation is said to derive from the innate psychological needs for competence, autonomy and relatedness. It is also recognised that people are intrinsically motivated to partake in *interesting activities* (Ryan and Deci, 2000). In

support of this, Kanfer (1994) presents three concepts of intrinsic motivation. The first involves arousal and stimulation, the second, competence, and the third, personal control or autonomy. Lindenberg (2001) suggests that intrinsic motivation has two components, enjoyment based intrinsic motivation, and an obligation or community based intrinsic motivation based on a desire to conform to group norms.

On the other hand, Eisenberger *et al.* (1999) suggest that intrinsic motivation is a broader concept involving task *content* and task *context*, including rewards, in the satisfaction of needs. According to these authors, personality and culture are primary factors in determining the needs, and extrinsic motivators play an important role in satisfying intrinsic motivation. Kreps (1997) suggests that apparent intrinsic motivation may be a response to *fuzzy extrinsic motivators* such as meeting the need for esteem from colleagues. Frey and Jegen (2001) suggest that it is, perhaps, impossible to empirically distinguish between intrinsic and extrinsic motivation.

The literature on extrinsic motivation is long established, in particular in the field of economics. In standard economic theory, extrinsic motivation is considered as the variable, whereas intrinsic motivation is an *exogenously given constant* (Frey and Jegen, 2001). The main body of evidence supports the notion that extrinsic rewards can be used to arouse, direct and maintain the persistence of effort of workers in an application of agency theory.

### 4.3 **Agency Theory**

In agency theory, the *principal* employs an *agent* to carry out a task. The aim of the principal is to align the agent's actions to the task required, and to do so he uses incentives in the form of *economic rent* (Eisenhardt, 1989a; Schoemaker, 1990). In simple terms, using expectancy theory (Vroom, 1964), an employer is trying to manipulate an employee's activities and behaviour using extrinsic rewards. In an attempt to achieve the desired influence, the principal imposes control mechanisms to moderate the agent's self-serving behaviour (Jensen and Meckling, 1976, Eisenhardt, 1989a). The model of man adopted in agency theory - *economic man* - is that of McGregor's Theory X, in which rational principals and agents seek to maximise their utility (Davis *et al.*, 1997).

In the standard agency theory, increasing incentives from a principal must lead to increased effort by the agent, and there is a body of evidence supporting this position (e.g. Prendergast, 1999; Lazear, 2000). However, there are challenges in the literature to such assumptions, and bounded rationality (Simon, 1957), non-linearity and differences in attitudes to risk (Kahneman and Tversky, 1979) are raised as truer reflections of reality.

Doucouliaos (1994) introduced two main criticisms of the assumptions of economic man. Firstly, agents are not normally maximisers and they adapt rather than optimise the opportunity. Secondly, agents will not always act independently of the group. He asserts that economic man is a reasonable model of man on the basis of constrained maximisation arguing that maximising behaviour must take into consideration the opportunity cost of further effort.

This is consistent with Maslow's hierarchy of needs theory. Whilst contingent rewards may motivate a worker to satisfy basic needs, once they have been satisfied, then more of the same reward may adversely affect the autonomy seeking, self-actualising man (Maslow, 1970).

The link between incentive and motivation may not follow the singular and linear outcome expected as incentives may cause several outcomes, including the opposite to those intended (Merton, 1936). In the literature there is some empirical evidence to suggest that challenges to agency theory are valid and several studies indicate that intrinsic motivation can become negatively affected when extrinsic incentives are introduced (Deci, 1971; Frey and Jegen, 2000; Gneezy and Rustichini, 2000).

#### **4.4 Stewardship Theory**

Whilst agency theory has its roots in economics, stewardship theory has its foundations in psychology and sociology. Stewardship theory challenges the generalisation of the assumptions in agency theory. The model of man in stewardship theory is pro-organisational and collectivist (Davis *et al.*, 1997) rather than self-serving. The steward considers that cooperative behaviour is more valuable than self-serving behaviour and he attempts to align his own objectives with those of the organisation. This is not to suggest that a worker does not have individual needs that must be met, but the steward

accepts a compromise between organisational and personal needs. Whilst the steward is arguably still maximising his utility, the value placed on pro-organisational behaviour is greater than on individualistic behaviour and the steward's intentions are aligned with those of the organisation.

Similar to agency theory, in stewardship theory a principal engages a steward to carry out responsibilities within an organisation. Here though, the intentions of the principal and steward are assumed to coincide, so the effectiveness of the steward becomes dependent on the environment in which she works rather than solely on knowledge, skills and motivation. Stewardship theory suggests that working situations with extended autonomy, empowering governance and reduced monitoring will elicit more favourable levels of motivation from stewards. Close monitoring and control can be counter-productive as it diminishes the pro-organisational behaviour of the steward by undermining the sense of trust and thus reduces motivation (Davis *et al.*, 1997).

#### **4.5 Comparison of Agency Theory and Stewardship Theory**

The fundamental foundations of agency theory can be considered amongst the first assumptions of modern economics of the working man. During the previous era of scientific management and cost accounting the first principles adhered to in agency theory were both necessary and adequate approximations of reality. It can now be argued that managerial conditions have changed in many situations and those first principles must be reassessed for relevance in today's organisations (Johnson and Kaplan, 1987; Johnson, 1992). Maslow (1970) believed that:

*“Human nature has been sold short. Man has a higher nature, .... [including] the need for meaningful work, for responsibility, for creativeness, for being fair and just, for doing what is worthwhile, and for preferring to do it well.”*

(Maslow, 1970, p.238)

Under these conditions, applying the basic assumptions of economics limits the realisation of potential in workers and constrains the opportunity for self-actualisation.



In doing so, the effect on workers is to become the economic model of man in a self-fulfilling prophesy (Argyris, 1973).

Davis *et al.* (1997) discuss the main distinctions between agency theory and stewardship theory under the two main headings of *Psychological Mechanisms* and *Situational Factors*.

#### 4.5.1 Psychological Mechanisms

The main psychological mechanisms that differ between agency theory and stewardship theory are motivation, identification and power. What differs in terms of motivation is the emphasis between extrinsic and intrinsic motivation. In agency theory, extrinsic incentives and explicit rewards are used as controlling mechanisms in an attempt to motivate the agent to provide sufficient effort in the intended direction. This approach draws on expectancy theory by providing a second level external valence to induce extrinsic motivation and it largely ignores the possible effects on intrinsic motivation at the first level (Vroom, 1964). According to Herzberg's theory, such incentives have the temporary effect of reducing *dissatisfaction* and may give the false impression of a performance improvement, but the methods used to control the agent are predicted to reduce *satisfaction* (Herzberg *et al.*, 1959).

The main assumptions in agency theory are similar to those expressed in McGregor's Theory X; that workers are predominantly extrinsically motivated. However, Theory X has been heavily criticised as being dysfunctional. Richardson (1995) suggests that the management strategy literature indicates that practices based on Theory X:

*“.... create personnel who are demotivated, conflictual and aggressive towards the formal organization which treats them in a “them” and “us” way, and who are disinterested about taking personal responsibility for the improvement of organizational performance.”*

(Richardson, 1995, p.11)

Stewardship theory is based on assumptions more akin to those of McGregor's Theory Y. In stewardship theory, frontline workers, particularly managers, are considered to be more intrinsically than extrinsically motivated. In organisations where stewardship theory applies, if extrinsic incentives result in a detrimental effect on intrinsic motivation, then it would be dysfunctional for management to use EPIs for the purpose of aligning frontline performance with strategy.

In stewardship theory, the incentives offered are more intrinsic and are more difficult to quantify. Exposure to training and development, teamwork, self-challenge and opportunities for self-actualisation are the kinds of rewards attained for the efforts of the steward (Hackman and Oldham, 1976). These rewards appear as satisfiers in Herzberg's theory and they tend to satisfy the higher order needs of Maslow's hierarchy.

Identification refers to how a worker relates to being a member of a particular organisation. A worker who has close organisational identification behaves consistently with stewardship theory and will make the organisational successes and the organisational failures a part of her own successes and failures. An *identified* worker accepts the organisation's vision, mission and values, and feels a greater identity with the organisation than simply being employed. The organisation becomes a part of the worker and she possesses a strong sense of loyalty and ownership. The performance and reputation of the organisation becomes a part of the workers own reputation. In situations where a worker is isolated from the organisational goals and externalises himself from organisational successes and failures, agency theory is a better fit (Davis *et al.*, 1997).

#### 4.5.2 Situational Factors

The main situational factors that define agency or stewardship are the management philosophy and culture of the organisation. In agency theory the management philosophy is control oriented. This has provided many successes through the mid to latter parts of the last century in organisations where short-term cost controls and productivity provided a competitive advantage (Lawler, 1992). However, there are questions over whether this approach provides the same long-term advantages as stewardship, as the motivators adopted as control mechanisms have short-term effects

and soon become hygienic (Herzberg *et al.*, 1959). Furthermore, as managers exert greater control, it creates a sense of micro-management of the workers. There is a sense of lack of trust between the principal and agent that diminishes the feelings of identification that the agent has with an organisation. Subsequently the worker becomes de-motivated, causing managers to exert even greater control measures, again in the self-fulfilling prophecy of agency theory.

In stewardship theory, the management philosophy is involvement oriented and highly participative, consisting of open communication, worker empowerment and involving high degrees of trust. There is greater emphasis on the self-actualisation of workers relying on self-control and intrinsic self-motivation. As managers release their control in favour of self-inspection, workers gain a feeling of empowerment. There becomes a sense of responsibility and ownership in the worker and there is increased sense of identification. This subsequently motivates the worker, and results in a self-fulfilling prophecy of trust, hence leading to stewardship (Davis *et al.*, 1997).

The different self-fulfilling prophecies of agency and stewardship are intuitively appealing theories. However, reality is likely to reflect that agency and stewardship must coexist in a balance of external control and self-control that is reliant on a number of other situational factors.

The culture of an organisation can also affect the applicability of agency and stewardship theories. Culture can relate to national, organisational and team characteristics amongst others. There are two main aspects of culture that influence the relationship between a principal and an agent or a steward. The first is whether there is an individualistic or a collectivistic culture. An individualistic culture is one where personal goals are emphasised over organisational goals. It is noted that nations that have tendencies towards individualistic cultures include the United States and Western Europe. They are characterised by familiarity between workers and direct communication, encouraging conflict as a path to solutions. A collectivistic culture is one where team goals and group achievement are considered to be of primary importance. Organisations with a collectivistic culture are characterised by more formal contact between workers and longer-term relationships. Collectivistic cultures are more often associated with parts of Asia and Southern Europe (Davis *et al.*, 1997).

The second aspect of culture is power distance, which is explained as the acceptance of authority by less powerful workers. In high power distance organisations less powerful workers accept that there are large differences in authority as one climbs the hierarchical ladder. In low power distance cultures, organisations have effectively flatter structures and the differences in power between the levels within the organisation are less marked (Davis *et al.*, 1997).

Agency theory is connected with individualistic and high power distance cultures whereas stewardship theory relates to collectivistic and low power distance cultures. There are, however, many circumstances where nations and organisations have individualistic but low power distance cultures, such as in the United States, or collectivistic and high power distance cultures, such as in Japan, leading to uncertainty about whether agency or stewardship assumptions are more appropriate (Davis *et al.*, 1997). De Voe and Iyengar (2004) found in their study that different cultures perceive different types of motivation of principals and agents, with North Americans perceiving each other to be extrinsically motivated, Asian Americans were equally extrinsically and intrinsically motivated and Latin Americans more intrinsically motivated.

Agency theory and the effects of extrinsic motivation, and stewardship theory and the effects of intrinsic motivation are well established in the literature. However, the basic assumptions of man from which the theories are developed might be considered incomplete representations of the real world and the theories are not universally supported. In practice, intrinsic motivation and extrinsic motivation are not independent variables and other theories have been developed to consider the interaction between them.

This research is concerned with the effects of EPIs on the alignment of frontline police officers with the organisational strategy. The research will test the applicability of agency and stewardship theories to the particular setting of a police organisation in Asia.

#### 4.6 General Interest Theory

In general interest theory (Eisenberger *et al.*, 1999), it is supposed that intrinsic motivation is influenced not only by the perceptions of self-determination and competence but also by personality and culture. It is both the content and the context of a task that is important for motivation.

For the agent, an extrinsic performance incentive signals the importance of a task and indicates its context. The offer of a reward signals a transfer of determination from the principal to the agent and, therefore, should increase the agent's perceived self-determination. Also, where a reward is given for meeting a specific performance standard, intrinsic motivation will be positively affected by the implied importance of the task. Conversely, where a reward is offered for simply engaging in a task, the importance of the task is not conveyed and intrinsic motivation will not be positively affected.

Eisenberger *et al.* (1999) use general interest theory to argue that extrinsic rewards can positively or negatively affect intrinsic motivation, depending on the way that they are presented, and the empirical evidence appears to support their case. However, the situation can be explained using Herzberg's contrast between motivators and hygies (Herzberg *et al.*, 1959).

*“.... the removal of a decrement in performance by the elimination of job dissatisfaction is often mistakenly referred to as a positive gain in performance.”*

(Herzberg *et al.*, 1959, p.118)

The positive effect of rewards being described in general interest theory is, perhaps, a negative effect of extrinsic performance incentives on intrinsic motivation, coupled with a positive effect of increased recognition, a sense of purpose and achievement. In effect, the power of the reward is as a vehicle for Herzberg's motivators, not in the motivating effect of the reward itself. This leads to the question of whether, overall, extrinsic performance incentives are functional or dysfunctional in aligning the activities of frontline staff with the organisational strategy.

#### 4.7 Crowding Out Theory

The adverse effects of extrinsic performance incentives have been the topic of considerable debate in the literature. The basic concept of *crowding out* is that under certain circumstances, extrinsic performance incentives lead to a reduction in intrinsic motivation (Frey and Jegen, 2001) and a potential reduction in effort (Fehr and Falk, 2002).

A number of controlled experiments testing crowding out theory have been conducted that conclude that under certain conditions, increasing extrinsic incentives reduces the intrinsic motivation for a task (e.g. Deci, 1971; Gneezy and Rustichini, 2000). The results of these experiments, and many others since, suggest support for crowding out theory but this is not universally accepted. Criticisms include the validity of the experiments, interpretations of results and contradictory findings (Kunz and Pfaff, 2002).

Whilst there have been at least two meta-studies that present alternative views as to the psychological rationale behind such observations, there is general agreement that extrinsic incentives *can* have a detrimental, neutral or incremental effect on intrinsic motivation (Eisenberger and Cameron, 1996; Deci *et al.*, 1999; Eisenberger *et al.*, 1999; Kunz and Pfaff, 2002).

Harvey (2005) explains motivation crowding out by drawing upon the assumptions of both economists and psychologists. Firstly, an individual has preferences over different types of motivation and the extrinsic and intrinsic utility of the various motivations drive individual choice. Extrinsic incentives may lead to a change in preferences of the agent. Secondly, depending on the needs of an individual, extrinsic performance incentives result in a change in the perception an agent has for self-determination and competence (Frey and Jegen, 2001).

Kreps (1997) indicates that whilst the experimental evidence may have other explanations, there is sufficient anecdotal *smoke* to suggest a *fire*, although it is uncertain to what extent crowding out is economically important or even relevant (Fehr and Falk, 2002). In contrast to crowding-out, there are circumstances whereby the use

of extrinsic incentives raises intrinsic motivation; this is termed crowding-in (Frey and Jegen, 2001; Kunz and Pfaff, 2002).

#### **4.8 Extrinsic Performance Incentives**

There is no universally accepted definition of an EPI. The literature on motivation and organisational behaviour adopts several similar terms such as extrinsic rewards (Guzzo, 1979; Deci *et al.*, 1999), extrinsic incentives (Kreps, 1997; Gneezy and Rustichini, 2000; Bénabou and Tirole, 2005) and explicit incentives (Courty and Marschke, 2004; Harvey, 2005). The terms *performance incentive* and *reward* are often used interchangeably and EPIs can be both tangible and non-tangible (Condly *et al.*, 2003). *Explicit* performance incentives are considered to be a subset of EPIs.

For the purpose of this research, and in the absence of a clear lead from the literature, a definition for EPIs has been constructed from the component parts of the term.

The Concise Oxford English Dictionary (2004) defines an incentive as, “*a thing that motivates or encourages someone to do something*”; performance as, “*the action or process of performing a task or function*”; and extrinsic as: “*not essential or inherent*”. Using these definitions, for the purpose of this research an extrinsic performance incentive is defined as:

*Something, not inherent to a task or function, that motivates someone to carry out the action or process of performing that task or function.*

Extrinsic incentives that are linked to performance serve many purposes including: rewarding performance and recognising effort, communicating strategic directions and priorities, guiding decision-making, promoting organisational learning and personal development, and motivating frontline staff (Simons, 2000).

There are many forms of EPI ranging from explicit economic incentives, such as performance related pay, bonuses and salary increases, to implicit non-economic incentives such as praise, work opportunities and recognition (Baker *et al.*, 1988). One

possible distinction between the various EPIs is between incentive compensation and career concerns (van Herpen *et al.*, 2006).

#### 4.8.1 Incentive Compensation

Clark and Wilson (1961) place incentives in three broad classifications, *material*, *solidary* and *purposive*. Material incentives are tangible and have monetary value or can be translated into such. Solidary incentives are intangible, such as a feeling of socialising or *esprit de corps*, but tend not to be related to the primary aims of the organisation. Purposive incentives are also intangible but they are related to the organisational purpose and might include, for example, *the elimination of corruption or inefficiency from public service*. Solidary incentives can be extended to create a fourth category of *status incentives*, which are non-tangible rewards such as esteem and recognition (Wilson, 1989; Dollman, 1996).

Dermer (1975) identifies seven types of extrinsic reward: *recognition*, *increased responsibility*, *advancement*, *better supervisory relations*, *better peer relations*, *increased pay*, and *job security*. Condly *et al.* (2003), in a meta-study of the effects of incentives, make the distinction between *monetary incentives*, *non-monetary tangible incentives* and *non-tangible incentives*. Similarly, Stajkovic and Luthens (1997) classify three behaviour modification interventions in the form of *financial reinforcement*, *non-financial reinforcement* and *social reinforcement*.

Guzzo (1979) reviews four methods for classifying rewards into extrinsic and intrinsic groups. The first classification considers the link between the activity and the reward in which an extrinsic reward has no direct connection with the activity. The second considers the functions of a reward in satisfying different kinds of needs, with low order needs being satisfied by extrinsic rewards. The third classification considers the reciprocal influence of extrinsic and intrinsic rewards on extrinsic and intrinsic motivation. The fourth considers the cognitive effects of the reward, in particular relating to the perceptions of controlling behaviour and locus of control.

Osbourne and Plastrik (2000) list six tangible extrinsic incentives in their *performance management toolkit* for transforming government: *performance awards*, *psychic pay*



(such as paid time-off or new equipment), *performance bonuses*, *'gainsharing'*, *shared savings* and *performance contracts and agreements*.

Looking to the literature for empirical evidence, there is considerable support for the assertion that the use of EPIs results in increased worker effort and improved organisational performance (Gibbons, 1998). In a meta-study of 45 published articles comparing incentives with performance, Condly *et al.* (2003) revealed that incentives led to significant increases in performance, averaging 22% across all variables. Monetary incentives gave gains of 27% compared with non-monetary tangible incentives at 13%, although there was no analysis of possible dysfunctional behaviour conducted in the research. The authors identified a general weakness in the incentives literature in that before and after comparisons were often not conducted and that treatment and non-treatment groups were not compared. This brings into question some of the empirical research findings supporting the use of EPIs, particularly when the positive performance gains identified in the groups that receive incentives are not aggregated with the possible performance reductions as a result of removing an incentive (Deci, 1971) or the potential negative impact on the performance of those not in receipt of a reward as a response to perceptions of inequity (Dailey, 1990; Vansteenkiste and Deci, 2003).

Stajkovich and Luthens (1997) found that in manufacturing industries, financial performance incentives used for organisational behaviour modification had significant effects, but not significantly different from non-financial incentives. In service organisations, though, financial behaviour reinforcers had significantly greater effects than non-financial incentives.

There is a body of literature indicating that tangible rewards are dysfunctional and could even effectively become punishments (e.g. Kohn, 1993). Intangible incentives such as prizes and recognition should not be used to manipulate workers as they tend to create fewer winners than losers, with the potential for the aggregated negative effects on losers being greater than the positive effects on the winners (Carder and Clarke, 1992, cited in Pyzdek, 2003).

Kreps (1997) suggests that where a job is ambiguous and difficult to measure in a meaningful way, EPIs may cause workers to focus their efforts on trying to influence their supervisors either directly by *politicking*, or indirectly by *dressing up* activities and results. Furthermore, in a team environment, agents seeking rewards are less inclined to help co-workers and, particularly if contributions cannot be easily attributed, there is a tendency to *free-ride* (Holmstrom, 1982). Where rewards are group-based, then efforts may regress to the mean and outstanding workers may lose incentive or leave (George, 1992). This is contrasted by the possibility that peer monitoring can counter such problems and that team performance incentives can raise productivity (Prendergast, 1999).

Whilst it is apparent that employees from a range of industries respond differently to rewards, there are also indications that individuals within the same industry also respond to EPIs differently. Individual differences in personal perspectives mean that some people are predominantly extrinsically motivated whilst others are intrinsically motivated (Bateman and Crant, 2003). However, research in the field often ignores this assertion and there have been few empirical studies that consider the correlation between the value an individual places on an EPI and the motivation, performance and behaviour of that individual. Studies of this sort are seen in some of the literature on Person-Environment Fit (e.g. Edwards, 1996) and with respect to the value placed on monetary incentives (e.g. Mitchel and Mickel, 1999), but further studies of a more general nature may go some way to explain why there is contradictory evidence as to the effectiveness of EPIs (e.g. Paleologou *et al.*, 2006; Manolopoulos, 2008).

#### 4.8.2 Career Concerns

Apart from incentive compensation, an agent's activities can be aligned with the interests of an organisation through career concerns and the prospect of promotion. Promotion has two main purposes. Firstly, promotion provides a method of placing suitably capable workers in positions in the organisational hierarchy. Secondly, promotion is one of the primary incentives to workers who value the additional benefits that higher position within the organisation brings, in particular in organisations with traditional linear career structures, rigidly structured organisational advancement and low job mobility (Baker *et al.*, 1988; Sullivan and Baruch, 2009).

Career concerns draws on the concept of implicit incentives, in which an agent applies effort in order to increase his perceived value to the organisation. In this situation, an agent will work hard to build a positive reputation but once that reputation is established and the additional value of greater effort reduces, then the levels of effort will be optimised rather than maximised (Burgess and Metcalf, 1999).

Promotion to meet the needs of an organisational structure can also follow the tournament model, where the tournament is in the form of a competitive promotion exercise (van Herpen *et al.*, 2006). Agents are able to estimate the utility and opportunity to win the tournament (promotion) and will adjust their effort levels accordingly (Lazear and Rosen, 1981).

There is significant evidence that tournaments can improve effort and performance, although greatest support for this assertion comes from the literature on sports competition rather than from private or public sector organisations (Burgess and Metcalfe, 1999). However, there is also evidence that, in order to improve the prospects of winning the tournament, weaker competitors will take higher risks and focus their efforts in an individualistic direction rather than increase or align their efforts with the organisational strategy (Becker and Huselid, 1992). In situations where there are limited rewards that are perceived to be of high value, such as promotions, and where comparisons between colleagues determine the winner, then dysfunctional behaviour such as sabotage, non-cooperation and *currying favour* can result (Lazear and Rosen, 1981).

Rosenbaum (1979) outlines the dysfunctional effects of the early identification of workers with potential for promotion, who are then afforded greater opportunities, thus leading to a self-fulfilling prophesy. In an application of the concept of implicit incentives, the outcomes of the tournament mean that *early winners* will become risk averse. Furthermore, losers of tournaments show far less intrinsic motivation than either winners or those who do not compete, although there is evidence of *ego-involved persistence* (Vansteenkiste and Deci, 2003).

Prospect theory indicates that the value placed on a loss is greater than the value placed on a gain of equal magnitude (Kahneman and Tversky, 1979) and in most situations, competitive promotion exercises result in fewer winners than losers.

Courty and Marschke (2004) conclude that there is empirical evidence consistent with the view that EPIs result in dysfunctional and costly behaviour in agents. There is a tendency for incentives to undermine morale and they fail to improve staff commitment or the quality of their work (Makinson, 2000). Whilst there is acknowledgement that this might be partly due to poorly designed incentive schemes, it is not certain that with different designs the problem will be resolved.

#### **4.9 Extrinsic Performance Incentives in the Public Sector**

A broad literature review suggests that support for the use of EPIs in influencing the behaviour of frontline workers is questionable. In this section, the review focuses on the literature on EPIs in the public sector and, more specifically, the police.

In recent years, there has been an ongoing debate about the applicability of EPIs in the public sector and in a number of organisations performance related rewards have been introduced and the impact researched. Whilst there are difficulties with performance measurement in parts of the public sector due to measurability, multi-tasking and multiple principals, several researchers assert that EPIs can be effectively used to improve public sector performance (Propper and Wilson, 2003).

One of the early studies into a successful performance related pay system in the public sector was conducted on the Brazilian tax-collection authority (Kahn *et al.*, 2001). The authority had introduced significant bonus payments for increases in the collection of fines from tax evaders, with the results demonstrating an early improvement in productivity and a 75% increase in performance over the period from before the introduction of the scheme to the time of the research. However, a more recent study of the same scheme indicates that nearly all tax collectors are receiving the full bonus possible and that targets had become subject of a *ratchet-effect* in which the better the performance, the higher the future target (Ickes and Samuelson, 1987; Guedes, 2008).

Propper (2006) presents findings from a number of public sector applications of performance related incentives, including the medical, teaching and clerical professions. Studies in the medical profession indicate that doctors respond to incentives both positively, when rewarded for greater productivity and negatively, when incentives are reduced once a work quota has been reached. Teachers also demonstrated a positive response to incentives with pupils of performance rewarded teachers having generally higher improvements towards grades. In a case study for clerical workers, incentives had an effect on quantity, although not on the quality of work. However, some of the dysfunctions of reward systems became apparent, such as free-riding in large teams actually leading to reduced overall productivity (Propper, 2006). Other studies and literature reviews have identified similar characteristics whereby incentives appear to have a positive effect on measurable performance in the short-term but also have dysfunctional effects (e.g. Asch, 1990; Burgess and Rato, 2003; Courty and Marschke, 2004).

There are very few empirical studies into the effects of EPIs in police organisations (Burgess and Metcalfe, 1999). Police forces are generally considered to be coping agencies, in which the objective measurement of performance is difficult (Wilson, 1989). Most of the research that has been conducted appears to consider the effect of an incentive system on a single or a few aspects of organisational or task performance and the rigorous testing of hypotheses is rare.

Police measures of performance are generally designed around indicators such as crime rates and response times, this despite the knowledge that there are a multitude of factors outside of police control that contribute to crime rates, and that faster response times rarely result in lower crime rates (Swiss, 2005). Furthermore, with discretion being an important element of police work, there is considerable potential for EPIs to drive increased productivity in terms of output quantity without maintaining the quality or integrity of performance (Burgess and Rato, 2003).

*COMPSTAT*, a system of computer comparisons of standard crime statistics that drives semi-weekly performance reviews, has been reported as a highly effective incentive system, with police commanders keen to perform well in their geographical command when compared to neighbouring commands. Deployment strategies and tactics are implemented and tested on the frontline and those that fail to demonstrate performance

improvements are quickly discontinued. Early successes with this incentive driven approach indicated a 26% drop in crime rates in New York City during the period between 1993 and 1995 (Bratton, 1999). However, later studies have contested that other factors in society may have caused the drop in crime rates, that COMPSTAT neglects the long-term fostering of community-oriented policing, and that the system may even be degrading police performance (Greene, 2000; Leggett, 2002; Willis *et al.*, 2003).

A study of a policy in the United States in which police agencies were permitted to keep a significant proportion of the assets they seized in drug arrests - *finders keepers* (Baicker and Jacobson, 2004) - indicated that productivity increased and police tactics were refined in response to such EPIs. However, in the study there was no assessment of any dysfunctional behaviour that may have been occurring, such as focusing solely on income producing activities at the cost of other important policing duties (Moore and Braga, 2003). The modification of tactics, activities and behaviour in order to maximise police performance might be an intuitively appealing concept, yet as Perisco (2002) identifies, such modifications might lead to racial and gender profiling which may be politically and socially unacceptable. Any improvement in operational performance through focusing police activities might need to be balanced with a far greater cost in terms of reparation measures in community policing.

There are a limited number of studies into the direct effects of EPIs on frontline police officers' behaviour and attitudes. In the introduction of an article on performance driven public services, van Bockel and Noordegraaf (2006) cite two examples that demonstrate police responses to EPIs. In the first, a Dutch police commissioner emphasises that his performance contract will not influence decisions on which cases are afforded greater resources. In the second, two French frontline police officers would not conduct an investigation into a robbery because it would raise the recorded crime rate which could subsequently place their bonus at risk (Dalrymple, 2004, pp. 171-2, cited in van Bockel and Noordegraaf, 2006).

In a recent exploratory case study into the South African Police Service, the feeling of inequity in the award of performance related rewards was considered to be the biggest contributing factor to the de-motivation of frontline staff (Schwartz *et al.*, 2007). Despite a growing body of empirical evidence that questions the use of EPIs in a police

setting, policies promoting the use of performance related rewards and incentives continue in many police services (e.g. Spottiswoode, 2002).

#### **4.10 Effort-Reward Imbalance**

In exploring the possible effects of EPIs, the researcher was searching for a practical model that captured a number of concepts, including equity, expectancy and individual differences. Effort-reward imbalance (ERI) offers a potential way of measuring the real impact of EPIs on individual performance (Siegrist *et al.*, 2004).

ERI is a concept used in medical research to link certain cardiovascular diseases to stressed workers. The ERI Model is related to expectancy theory (Vroom, 1964) and is based on the principle of reciprocity. A worker expends a certain amount of effort and in return expects a certain level of reward. Where those expectations are met and high effort is reciprocated with high rewards, then this will lead to positive well-being. On the other hand, where non-reciprocity occurs and high efforts are matched with low rewards, then this leads to stress (Siegrist *et al.*, 2004).

In ERI, the emphasis is on the work role and rewards are associated with high order needs such as belonging, esteem and actualisation. ERI is potentially high in job situations where job descriptions are poorly defined or where mobility in the labour market is limited, where workers expend high effort in the expectation of future rewards and where workers become *overcommitted* (Siegrist *et al.*, 2004). Arguably, these circumstances are characteristic of a frontline police officer's role.

Over-commitment occurs when workers have a high level of intrinsic motivation but fail to recognise their own ability to cope with the external demands of work. Workers who are overcommitted often display behaviour such as need for approval, high levels of competitiveness, the inability to withdraw from work, and irritability (van Vegchel *et al.*, 2005). Where workers have a high intrinsic drive to do well but experience a high ERI then dysfunctional behaviour can result (Martinson *et al.*, 2006).

#### 4.11 Summary

As the research being conducted in this study is exploratory in nature, this chapter has covered a very wide range of issues from the literature relating to EPIs.

The concepts of intrinsic and extrinsic motivation have been introduced as the link between individual performance and EPIs. The theoretical literature suggests that EPIs have a short-lived effect on extrinsic motivation and a potential dysfunctional effect on intrinsic motivation (Herzberg *et al.*, 1959; Eisenberger *et al.*, 1999; Frey and Jegen, 2001; Gagné and Deci, 2005). Whilst there is a large body of empirical evidence to support the use of EPIs to manipulate an agent to align his activities and behaviour with a principal's intentions, there are a growing number of studies suggesting that a stewardship approach may be more functional, particularly in the long-term. In collectivistic cultures, such as often found in Asia, and in organisations with a low power distance, stewardship theory appears to apply (Davis *et al.*, 1997).

In terms of specific EPIs, there is a difference between incentive compensation, such as performance bonus pay, and career incentives, such as promotion (van Herpen *et al.*, 2006). In particular, when EPIs are highly valued and in short supply, the internal competition tends to create more losers than winners, with a potential drop in the aggregated individual performances across the organisation (Rosenbaum, 1979).

In the public sector there are several instances where the use of EPIs has resulted in dysfunctional and unaligned behaviour. Case studies that have promoted the use of EPIs in a police setting are being challenged in the literature (Greene, 2000).

This chapter has presented the broad literature on EPIs and introduced the concept of ERI to the thesis, which is used as one of the exploratory methods of measuring the regulation perspective of EPIs in the main study. The next chapter is used to synthesise the literature covered in the previous three chapters and to develop the basic research theory.



## **CHAPTER 5**

### **LITERATURE SYNTHESIS AND THE BASIC RESEARCH THEORY**

This chapter of the thesis draws together the three main literature review topics of organisational alignment, individual performance and EPIs to develop the basic research theory.

#### **5.1 Literature Summary**

One of the main challenges in strategic management is in aligning the internal activities of an organisation, both vertically and horizontally, with its strategy in order that the intentions of senior management are realised on the frontline (Miles and Snow, 1978; Mintzberg, 1978; Venkatraman and Camillus, 1984; Labovitz and Rosansky, 1997). By attaining an optimum level of alignment, an organisation can expect to achieve superior performance (Kaplan and Norton, 2006).

To achieve such organisational alignment, the structures, systems and processes of internal management, the strategic control and performance measurement systems, and the activities, attitudes and behaviour of frontline employees must all be aligned with the organisational strategy (Neely, 1999; Beer *et al.*, 2005; Colvin and Boswell, 2007). Within the literature on strategic management, considerable attention has been paid to the alignment of strategy, structure and processes (e.g. Miles and Snow, 1978) and with performance measurement systems (e.g. Kaplan and Norton, 2006), but the alignment of the individual performance of frontline employees is an area that tends to be concentrated in the human resources management literature.

Aligning the performance of frontline employees with the organisational strategy is a crucial element in an organisation's success, yet it is often the case that strategic control and performance measurement systems do not, or perhaps, cannot capture the necessary information to reflect individual employees' contributions to the organisation (Campbell *et al.*, 1993). In order to capture a broad measure of an employee's contribution, individual performance can be gauged through task performance,

contextual performance and adaptive performance. Whereas task performance is usually explicitly defined in a job description, contextual performance and adaptive performance are considered to be extra-role behaviours, although they remain an essential element in an organisation's success (Schmitt *et al.*, 2003). Aligning all aspects of frontline employees' individual performance with the organisational strategy is an important part of organisational alignment.

In an application of agency theory, organisations may use extrinsic performance incentives (EPIs) such as performance related pay, promotion, awards and prizes to manipulate the activities and behaviour of frontline employees such that they are aligned with the organisation's strategy. There is a great deal of experimental and empirical evidence to indicate that employees respond to EPIs and that organisational performance can be positively affected (Condly *et al.*, 2003). However, the literature also presents a contrasting view, that EPIs have a negative impact on intrinsic motivation and, in practice, they lead to dysfunctional behaviour on the frontline (Courty and Marschke, 2004). In particular, under tournament conditions in which there are a limited number of rewards and normally a far greater number of competitors, whilst winners might arguably be effectively motivated, the losers become de-motivated (Carder and Clarke, 1992, cited in Pyzdek, 2003; Vanseeenkiste and Deci, 2003).

## **5.2 Literature Synthesis and the Development of the Basic Research Theory**

The research question is exploratory:

*How do extrinsic performance incentives affect the alignment between frontline police performance and police strategy?*

Based on the literature review a basic theory model, at figure 5.1, has been developed to consider the effects of EPIs on organisational alignment, and on the task, contextual and adaptive performance of frontline workers. Following the logic of the research process suggested by De Vaus (2002, p.16), conceptual propositions are developed (sub-sections 5.2.1 to 5.2.5) to support the basic research theory.

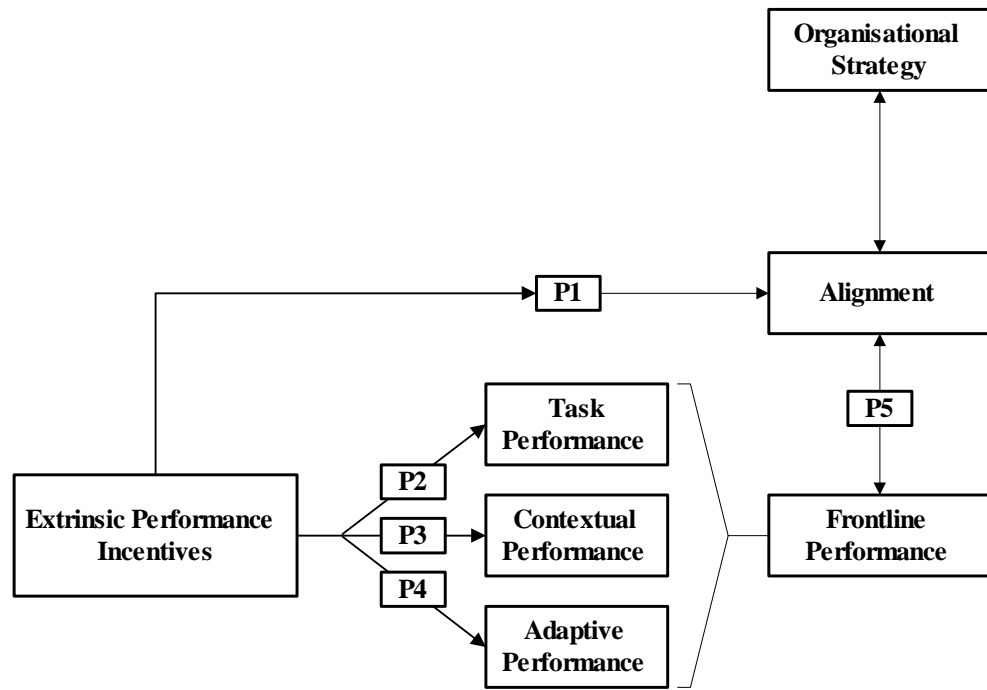


Figure 5.1 - Basic Theory Model

### 5.2.1 Extrinsic Performance Incentives and Organisational Alignment

One of the key elements in achieving organisational alignment is the alignment of the strategic control and performance measurement, and the reward systems with the organisational strategy, staff skills, culture and values (Bradach, 1996). In the strategic management literature, rewards and incentive schemes that are aligned with strategic performance measurement are presented as a tool with which to drive alignment at the frontline and improve organisational performance (Labovitz and Rosansky, 1997; Kaplan and Norton, 2006). Despite the number of case studies cited in which strategically aligned reward and incentive schemes have resulted in strategically aligned behaviour (Schneider *et al.*, 2003), the literature suggests that achieving organisational alignment through performance measurement and linked rewards may not always be practical (Franco and Bourne, 2003; Colvin and Boswell, 2007). Hanna *et al.* (2000) suggest that organisations with strategic control, performance measurement and reward systems that are unaligned will create *dysfunctional behaviour* and *erratic performance*. Despite the many theories presented in the literature, there have been few empirical studies that combine quantitative and qualitative research to robustly address the question of the relationship between EPIs and organisational alignment.

Agency theory supports the assertion that unaligned frontline employees can be brought into alignment through the use of EPIs. However, for workers with predisposed alignment, or for aligned behaviours and activities that are impractical to observe and measure, applying agency theory is difficult (Boswell *et al.*, 2006). Furthermore, in an application of expectancy theory (Vroom, 1964), where the performance of duties on the frontline requires the exercise of discretion, which is difficult to directly reward, then employees receiving rewards for task related activities that are readily measurable may neglect difficult to measure discretionary responsibilities that are critical to organisational alignment and the performance of the organisation. Boswell *et al.* (2006) suggest, in an application of stewardship theory, that in situations where frontline employees have an understanding and acceptance of the organisational strategy, then EPIs are more effective and motivating.

In answering the research question, it is necessary to establish whether there is a relationship between EPIs and organisational alignment in a police setting and explore the characteristics of such a relationship.

Proposition 1 (P1) - *There is a relationship between EPIs and organisational alignment in which greater expectancy of EPIs is associated with greater organisational alignment and more recent realisation of EPIs is associated with greater organisational alignment.*

#### 5.2.2 Extrinsic Performance Incentives and Task Performance

Task or in-role performance is the element of individual performance that is usually outlined in a job description and measured explicitly (Borman *et al.*, 2001a). In practice, EPIs are more often associated with task performance than with other elements of individual performance, although this trend may be shifting (Colvin and Boswell, 2007). Agency theory supports the premise that EPIs have an influence on task performance and there are several studies that indicate a positive link between EPIs and task performance (Condly *et al.*, 2003). There is, however, a long-established assertion that rewards have relatively short-lived value and that whilst expectancy might lead to greater in-role performance, once received, the motivation effects of rewards wane and the overall long-term effect is negative (Herzberg *et al.*, 1959; Benabou and Tirole,

2005). Furthermore, Bonner and Sprinkle (2002) suggest that the empirical evidence indicates that monetary incentives are not necessarily associated with improved task performance.

Van Scotter *et al.* (2000) report a positive correlation between EPIs such as medals, rewards and promotion, and task performance. Van Herpen *et al.* (2006), conducted a case study on the effects of expected and realised promotions on motivation that indicated a positive association between increased expectancy of promotion in the future and both extrinsic and intrinsic motivation. High levels of extrinsic and intrinsic motivation are generally accepted to be linked with better task performance (Herzberg *et al.*, 1959). Of the employees that had been promoted, intrinsic motivation peaked for those with three years since their promotion and fell dramatically for those who had been promoted further in the past, whereas extrinsic motivation was lower for those who had been promoted two or more years previously. If these indications are generalised, it would suggest that the expectation of receiving EPIs and the duration since receiving an extrinsic reward are important factors in determining whether a reward has been effective, although few other studies have considered these factors.

In exploring how EPIs affect individual performance in the context of an organisational strategy, it is necessary to establish whether there is a relationship between incentives and task performance and explore the nature of any such relationship.

Proposition 2 (P2) - *There is a relationship between EPIs and task performance in which greater expectancy of EPIs is associated with higher task performance and more recent realisation of EPIs is associated with higher task performance.*

### 5.2.3 Extrinsic Performance Incentives and Contextual Performance

Contextual behaviour is generally agreed to enhance organisational effectiveness (Podsakoff *et al.*, 2000), yet contextual performance has traditionally been considered outside of formal rewards systems. Recent developments though suggest that in practice, managers often subjectively recognise contextual performance in their assessments of individual performance and there is a trend towards more explicit recognition (Podsakoff *et al.*, 2000).

Research has yet to establish a firm relationship between EPIs and contextual performance although empirical evidence suggests that an indirect relationship indeed exists (Van Scotter *et al.*, 2000). Whilst it is reasonably accepted in the literature that task performance should be distinguished from contextual performance (Motowidlo and Van Scotter, 1994), there is often a correlation between an individual's work performance and their extra-role activities (Puffer, 1987), and hence the effects of incentives on contextual performance must be considered alongside task performance.

There have been few studies into the relationship between EPIs and contextual performance. O'Bannon and Pearce (1999) conducted a study on a small sample of employees ( $n=33$ ) from two organisations into the link between two elements of organisational citizenship behaviour (OCB) and employees' satisfaction with the pay administration and structure. The study indicated no link between gainsharing and perceptions of fellow employees' altruism, but a positive relationship between gainsharing and colleagues' teamwork.

Deckop *et al.* (1999) studied the link between performance related pay and organisational citizenship behaviour and found that the value commitment of employees was a moderating factor between EPIs and contextual performance. For employees with low value commitment, performance related pay and OCB were negatively correlated whereas for those with high value commitment, performance related pay had no apparent negative effect on OCB and a potential positive effect was noted. It is suggested that an employee exerting effort on task performance may compensate by reducing effort in contextual behaviours such as helping others.

Podsakoff *et al.* (2000) found that there was a negative relationship between indifference to EPIs and key elements of contextual performance such as altruism and sportsmanship, implying a positive relationship between the value placed on incentives and contextual performance. Whilst Pain and Organ (2000) suggest that management *need not be unduly concerned* with the effects of EPIs for contextual performance as such behaviour is generally determined by cultural aspects of an organisation, Poropat (2004) asserts that positive or negative behaviour that is repeatedly rewarded will become central to a person's character.

Chiu and Tsai (2007) studied the relationship between profit sharing and OCB with organisational commitment as a mediating factor. Cash-based profit sharing was found to have no significant relationship with OCB whereas stock-based profit sharing had a significant positive relationship with OCB with organisational commitment as a mediating factor. Similarly, Ke (2004) found positive relationships between employee satisfaction with stock ownership and job satisfaction, and between job satisfaction and OCB.

As contextual performance is an important element of an organisation's success, and with only a very limited number of empirical studies in the body of literature, it is necessary to further explore whether there is a relationship between EPIs and contextual performance and to better understand the characteristics of such a relationship.

Proposition 3 (P3) - *There is a relationship between EPIs and contextual performance in which greater expectancy of EPIs is associated with higher contextual performance and more recent realisation of EPIs is associated with higher contextual performance.*

#### 5.2.4 Extrinsic Performance Incentives and Adaptive Performance

In the rapidly changing working environments of modern organisations, in addition to task and contextual performance, adaptive performance has been proposed as a dimension of individual performance (Pulakos *et al.*, 2000). Whilst the body of literature has yet to be sufficiently developed, Schmitt *et al.* (2003) suggest that dimensions of adaptive performance are likely to be included in assessments of individual performance and thus are rewarded implicitly. Chen *et al.* (2005) noted a relationship between self-efficacy and adaptive performance, indicating that EPIs that positively affect self-efficacy would be positively associated with adaptive performance. Griffin *et al.* (2007) found that organisational commitment was a strong predictor of adaptive performance.

With the paucity of empirical research into adaptive performance it is necessary to identify whether there is a relationship between the effects of EPIs and adaptive performance and to further explore any relationship.

Proposition 4 (P4) - *There is a relationship between EPIs and adaptive performance in which greater expectancy of EPIs is associated with higher adaptive performance and more recent realisation of EPIs is associated with higher adaptive performance.*

#### 5.2.5 Organisational Alignment and Frontline Performance

The literature bases relating to organisational alignment and frontline individual performance are largely drawn from different fields although there have been attempts to draw them together through an integrated approach to human resources management (Huselid and Becker, 1995). In recent years, there has been increased interest in aligning frontline individual performance with organisational strategy (Boswell *et al.*, 2006) and strategically aligned behaviours have been identified as task, contextual and adaptive performance (van Riel *et al.*, 2007).

There have been several research studies suggesting the positive relationship between organisational performance and the alignment of individual employees with the organisational strategy (e.g. Bouillon *et al.*, 2006; Kaplan and Norton, 2006). However, the link between the dimensions of individual performance and the measurement of organisational alignment has yet to become established in the literature.

In order to complete the relationships in the research model, it is necessary to establish a correlation between individual performance and organisational alignment.

Proposition 5 (P5) - *There is a relationship between individual performance and organisational alignment in which higher individual performance is associated with greater organisational alignment.*

### 5.3 Summary

This chapter has summarised and synthesised the three main chapters of the literature review. In doing so, a basic research model has been developed and presented, and five exploratory propositions have been formulated.



The next chapter describes the pilot study used to further explore the propositions with a view to formulating testable hypotheses and identifying specific variables. The chapter goes on to develop the formal research theory and introduce the formal research model.

## CHAPTER 6

### THE PILOT STUDY AND THE FORMAL RESEARCH THEORY

This chapter presents the exploratory pilot study and the development of the formal research theory. Sections 6.1 to 6.4 introduce the background, the methodology, and the results and findings of the pilot study. Section 6.5 gives the conclusions of the pilot study and section 6.6 includes an evaluation of the lessons learned that were taken forward into the main study. Section 6.7 uses the findings of the pilot study to develop the basic research theory and formulate the formal research theory. The formal research model is introduced at section 6.8.

#### 6.1 Introduction

A pilot study is generally considered to be an important element of good research. There are many reasons for conducting a pilot study including the development and testing of research instruments such as a questionnaire, to collect preliminary data, and to trial the logistics of research. A pilot study can also be used in the form of an exploratory survey to gain a better insight into the subject matter of the research, to help define the scope for theory development and to design the research protocols (van Teijlingen and Hundley, 2001; Forza, 2002; Neuman, 2007).

In this research, the pilot study was conducted in the early stages to investigate some of the broad relationships between rewards and behaviour in a police setting. To provide a practical basis for quantitative and qualitative research, the researcher decided to focus the main study on a small number of the EPIs employed by police organisations. The pilot study provided both objective and subjective guidance towards the identification of the most suitable EPIs for further inclusion in the research. Discussions with candidates in the pilot study also assisted the researcher in determining a pragmatic approach to the question of defining *frontline police* and thus controlling the scope of the research. The results and findings of the pilot study were used in conjunction with the literature review synthesis to develop the formal research theory.

## **6.2 Pilot Study Sample**

The participants in the pilot study comprised a convenience sample of 26 volunteers from the Hong Kong Police Force (the Force) who were attending a course on research methodology run by the Hong Kong Police College.

The participants ranged in rank from Police Constable to Superintendent and represented a broad variety of police backgrounds. However, due to the nature of the course they were attending, the sample was skewed towards a criminal investigation and analysis background (58%, n=21), with uniform-branch and generalists being under-represented (23%, n=6 and 15%, n=4 respectively) and a single specialist (4%, n=1). The average length of police service for the respondents was 18.15 years (standard deviation 7.38). Male participants made up the majority of the sample (88%, n=23) which is in line with the general population of the police.

Whilst convenience sampling is subject to sampling error and the sample size was relatively small (Malhotra and Grover, 1998), similar samples have been used in other pilot studies (e.g. Powell, 1992; Brown and Magill, 1994; O'Bannon and Pearce, 1999; Pagell and Krause, 1999). Furthermore, the purpose of the pilot questionnaire was focused on narrowing the broad scope of the research topic and providing indications and feedback on the wide range of EPIs selected by the researcher based on his personal experience. Due to the background and nature of the sample, there were significant benefits in having direct and interactive feedback from the participants about the topic in general and specifically on the research methodology and pilot study questionnaire.

## **6.3 Pilot Study Questionnaire**

The pilot study comprised a three part questionnaire (Appendix A). The first part covered some background information on the participants including police rank and years of service. Part two measured participants' perceptions about the effects of EPIs on the levels of effort of frontline police officers. Ten EPIs in operation in the Force were selected by the researcher and presented in random order for consideration by the participants. A seven-point Likert scale was used from (1) '*reduces effort considerably*' to (7) '*increases effort considerably*'. Paleologou *et al.* (2006) used a similar approach

in a study linking performance to intrinsic and extrinsic rewards in the healthcare sector. The research instrument that was developed in their study proved to have acceptable levels of reliability and validity.

Part three comprised 18 statements regarding various behavioural aspects of the use of extrinsic performance incentives that probed for links between EPIs and functional and dysfunctional behaviour. In this section, a five-point Likert scale was used from (1) '*strongly disagree*' to (5) '*strongly agree*'.

Finally, given the particular make up of the sample, an invitation was made to suggest improvements to the research. In association with this request, several informal discussions occurred that helped to guide the research direction.

## **6.4 Pilot Study Results**

As the sample size was below 30, a T-distribution test was used to estimate the population mean for a 95% level of confidence. The results of part two are presented at table 6.1 and plotted onto the chart at figure 6.1, and the results of part three are presented at table 6.2 and plotted on the chart at figure 6.2.

### **6.4.1 Pilot Study Part Two Results**

Of the EPIs selected, the general perception was that the prospect of promotion increased most the effort levels of frontline police officers. This is consistent with the findings of Manolopoulos (2008) in which promotion related incentives such as salary, fringe benefits, job security and advancement were all considered to be high powered. This was followed by both a written commendation or compliment, and a favourable annual report grading, each having a degree of extrinsic value in the promotion system of the Force.

The less tangible EPIs of verbal praise and autonomy from supervision were next, with police managers perceiving that they induce slight increases in the levels of effort in frontline police officers. The prospect of disciplinary action and close supervision were perceived to have an overall neutral effect on effort levels, perhaps reflecting the

disciplinary culture of the Force and the hierarchical structure, with its demands for a high degree of supervisory accountability. A verbal rebuke from a supervisor was perceived as being slightly de-motivating, as was an adverse annual report, although there was a wide range of perceptions on the latter. Finally, no prospect of being promoted was perceived to reduce effort *slightly* to *moderately*.

Ser	Motivational Factor	Mean	Std Dev
A.	The prospect of promotion	6.12	1.45
B.	The prospect of formal disciplinary action	4.04	1.54
C.	A commendation/written compliment	5.54	0.81
D.	An adverse annual report grading	3.50	1.96
E.	A favourable annual report grading	5.44	1.19
F.	Autonomy from supervisory measurement of frontline productivity	4.81	1.41
G.	No prospect of being promoted	2.62	1.42
H.	Verbal praise from supervisor	4.92	0.74
I.	Verbal rebuke from supervisor	3.62	1.17
J.	Close supervisory measurement of frontline productivity	3.88	1.37

Table 6.1 - Pilot Study Questionnaire Part Two Results

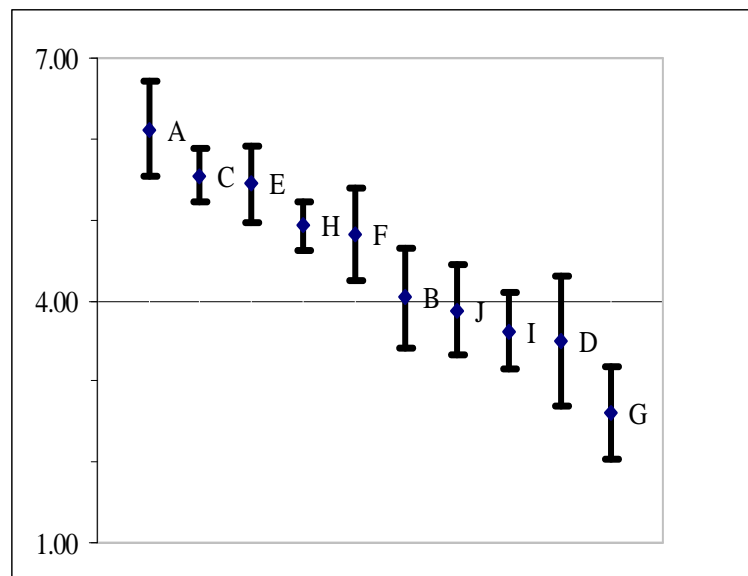


Figure 6.1 - Chart of Motivational Factors - Results (95% confidence)

#### 6.4.2 Pilot Study Part Three Results

Part three of the pilot questionnaire was designed to explore for possible indications of functional and dysfunctional behaviour relating to EPIs that could be used to further develop the basic research theory. The statements referred to different EPIs and probed for several different attitudes and behaviours indicated in the literature review.

The findings suggest that promotion may lead to generally functional behaviour as well as some of the dysfunctional behaviours covered in the literature review on EPIs (Chapter 4), such as currying favour and measure fixation (Lazear and Rosen, 1981; Moore and Braga, 2003). Commendations and compliments (which are recorded positive comments in an officer's record of service) were generally considered to induce behaviour that is in alignment with the organisational strategy.

##### Promotion

Statements 1, 10, 11 and 15 are generally concerned with the perceptions of police officers' behaviour in relation to promotion. The result of statement 1 indicates that agency theory applies and suggests that promotion can be used as an effective tool for organisational alignment.

Statement 10 considers the degree of alignment between the activities that earn merits towards promotion and the Hong Kong Police Force strategy, in terms of vision, common purpose and values. The result of statement 10 suggests that there is not full alignment between the strategy and activities that are rewarded towards promotion, although the neutral response also suggests that there may be no specific misalignment. Furthermore, the result of statement 11 indicates that officers are motivated to apply themselves to whatever activities are rewarded for promotion, regardless of the organisational strategy. If agency theory applies under these conditions, in which there appears to be no specific alignment between the reward system and the organisational strategy, then there will be no correlation between EPIs and organisational alignment. However, if stewardship applies, then officers will apply themselves to organisationally aligned activities outside of those being rewarded, in which case a correlation may be seen.

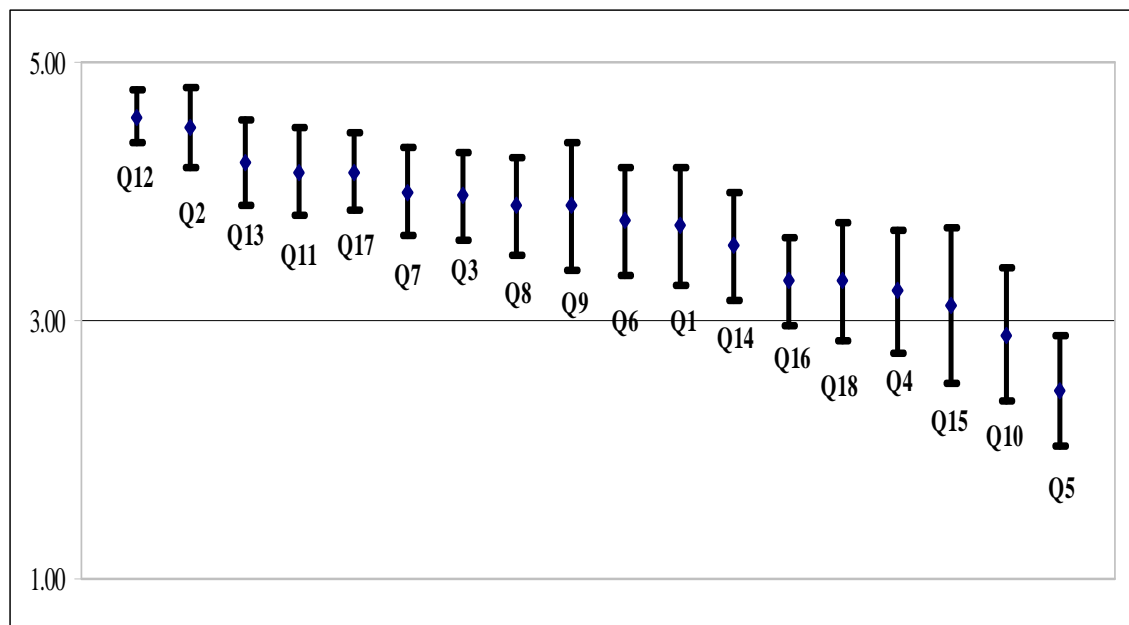
Ser	Statement	Mean	Std Dev
1	Frontline police officers generally focus their efforts on activities that earn merit towards promotion chances.	3.73	1.12
2	The awarding of commendations or compliments depends on the attitude of the supervisory officer.	4.50	0.76
3	Measuring frontline police activities creates competition between units/sub-units.	3.96	0.82
4	The use of extrinsic performance incentives causes frontline police activities to be more aligned with the Force's strategy.	3.23	1.18
5	All important frontline activities that a police officer conducts in his/her duties are given fair merit in annual reporting.	2.46	1.07
6	The prospect of disciplinary action fosters an acceptance of responsibility and accountability.	3.77	1.03
7	Officers who remain in a formation/unit generally expect their annual report grading to improve year by year.	4.00	0.85
8	Objective measurement of an officer's activities provides a more accurate representation of his/her performance than subjective observations.	3.88	0.95
9	Frontline police officers expect commendations or compliments for preventing crime on the streets.	3.88	1.24
10	The activities that earn merit towards promotion are fully aligned with the Force's vision, common purpose and values.	2.88	1.28
11	Frontline police officers will carry out activities that earn merit towards their promotion chances, even if they do not believe that the activity contributes to the Force's vision, common purpose and values.	4.15	0.83
12	Frontline police officers expect commendations or compliments for being involved in good arrests.	4.58	0.50
13	Police officers are generally cautious about making decisions because of the possibility of disciplinary action.	4.23	0.82
14	Frontline police officers generally time their best efforts to coincide with annual reporting cycles.	3.58	1.03
15	An officer's promotion grading reflects his/her relative competitiveness for promotion mainly against other officers in the same formation/unit.	3.12	1.51
16	The use of extrinsic performance incentives leads to dysfunctional behaviour.	3.31	0.84
17	Frontline police officers try harder on activities that may lead to commendations or compliments.	4.15	0.73
18	The best districts/divisions for an ambitious police officer to work are those with the highest number of arrests.	3.31	1.12

*Table 6.2 - Pilot Study Questionnaire Part Three Results*

### Commendations

Statements 2, 9, 12, and 17 relate to the award of commendations or compliments and in general all the participants supported the assertions. It is perceived that frontline police officers try harder on activities that may lead to commendations or compliments suggesting that they are also an effective motivational tool. The results of statements 9 and 12 suggest that frontline police officers expect commendations or compliments for both overt arrest activities and for preventative activities - both task performance activities - although arrest activities might be associated with greater expectation.

Further investigation in the main study was aimed at developing an understanding of the response of frontline officers to commendations and compliments in terms of the different behavioural constructs of individual performance.



*Figure 6.2 - Chart of Statement Responses - Results (95% confidence)*

### Appraisal Reports

Statements 5 and 14 relate to the performance appraisal system. The results for statement 5 suggest the strong perception that the performance appraisal does not reflect all of the important elements of a frontline police officer's work. This is commonly the



case for multi-task roles where measurement is difficult (Moore and Braga, 2003). However, the results of statement 8 indicate that objective measures give a better representation of an officer's performance than subjective measures.

The results to statement 14 indicate the possibility of gaming by candidates, particularly with regard to timing their efforts to coincide with reporting cycles (Courty and Marschke, 2004). This is further supported in statement 7, for which the results suggest that there is an expectation that remaining in a posting will lead to improved annual report grades for a candidate year on year.

This phenomenon may be the result of (or the cause of) a ratchet effect (Ickes and Samuelson, 1987; Guedes, 2008) whereby it is expected that duration in post has a significant influence over performance ratings. Hence effort is moderated in early periods in order to be able to demonstrate increased performance in later periods. Furthermore, gaming and the ratchet effect may have an effect on individual performance in relation to the prospect of promotion, with those approaching a realistic promotion bracket timing their efforts to maximise their chances (Courty and Marschke, 2004).

### Competition

Statement 15 relates to the circumstances where the tournament effect may occur at a local level (Becker and Huselid, 1992). The results suggest that the conditions of competition for promotion *within* teams are not dominant. In contrast, the results for statement 3 suggest that there may be direct competition for productivity *between* teams.

This tournament effect may lead to measure fixation or gaming. The results for statement 18 indicate that there are particular work postings that might lead to improved prospects for officers. This may further enhance the inter-team competition with ambitious officers competing for higher productivity.

### Disciplinary Measures

Statements 6 and 13 related to the effects on behaviour of the police disciplinary process. The result for statement 13 indicates that the disciplinary system leads to caution about decision-making in frontline policing activities. On the other hand, the results for statement 6 indicate that the system also fosters the acceptance of responsibility and accountability. These results may reflect the strong disciplinary culture of the Hong Kong Police and perhaps the need for caution in conducting frontline police activities. Furthermore, when synthesised with the results from part two, the use of the disciplinary process appeared to have little impact on effort levels yet might lead to an attitude that appears to be in alignment with the strategy.

### Use of Extrinsic Performance Incentives

Statements 4 and 16 related directly to the use of EPIs. Whilst the results to both statements were not conclusive, there is a suggestion that the use of EPIs causes frontline police activities to be aligned with the police strategy and yet may also lead to dysfunctional behaviour. This supports the literature that suggests that there can be both positive and negative effects of extrinsic incentives.

Statements 2 and 5 suggest a perceived misalignment between EPIs and the activities rewarded. This draws in the possibility of an effort-reward imbalance (ERI) affecting individual performance or organisational alignment (Siegrist *et al.*, 2004).

## **6.5 Pilot Study Conclusions**

The main objective of the pilot study was to explore the subject matter and reveal the most suitable extrinsic performance incentives for further research. In view of the indicative results of part two, the researcher decided to focus the main study on the use of promotion, commendations and letters of appreciation (which are similar), and annual appraisal reports as EPIs. Furthermore, based on informal discussions surrounding the pilot study, and supported by the indicative results, the researcher considered that the individual perceptions of the value placed on EPIs were important in the behaviours they induced. Hence, in designing the measurement instruments for the

main study, the value placed on EPIs by individual respondents would be considered. In addition, the concept of effort-reward imbalance (ERI, Siegrist *et al.*, 2004) would also be explored as a possible dimension of EPIs.

The findings of the pilot study questionnaire suggest that EPIs have a direct correlation with task performance, but have no direct link with contextual performance unless it is specifically rewarded. Also, the open ended parts of the pilot study elicited responses that indicate that leadership and teamwork (related to OCBI) play a considerable part as an incentive. Pilot discussions suggested that in frontline police work, strong leadership and *esprit de corps* is an expected part of the job - an intrinsic motivation. In this respect, the researcher decided that contextual performance should be sub-divided into organisational citizenship behaviour towards the organisation (OCBO) and organisational citizenship towards the individual (OCBI) and these were considered as separate constructs in the main study (Williams and Anderson, 1991).

Promotion appears to have a significant effect on the motivation and types of activities and behaviour of frontline police officers, both as an incentive and a disincentive. The prospect of promotion raises an officer's levels of effort towards activities that earn merit towards promotion regardless of whether or not they are aligned with the Force's strategy. Furthermore, previous research indicates that promotion expectations are correlated with extrinsic and intrinsic motivation, and there are significant variations in motivation depending on the duration since the most recent promotion, and the expected duration to the next promotion (van Herpen *et al.*, 2006). In the main study semi-structured interviews, the possibility of the career stage of a frontline officer being a moderating factor was explored in respect to the effect of EPIs on organisational alignment.

## **6.6 Evaluation of the Pilot Study and Implications for the Main Study**

The pilot study was designed to explore the research topic and identify suitable EPIs for further study and was not used to test the instruments and format of the main study. However, some useful methodological information was gathered and the informal discussions with the candidates, who were all on a research methodology course, helped to guide the development of both the formal research theory and the research method.

In general, the pilot study research methodology worked well, although critical feedback from respondents on the format of the questionnaire led the researcher to use a consistent five-point Likert scale rather than a combination of scales in the main study. Furthermore, candidates suggested that the wording of the main study questionnaire and interview questions should be screened by police officers with recent experience of frontline work to ensure that there was minimal ambiguity or confusion. Translations of questionnaires in both English and Cantonese would be essential in this respect.

Whilst the pilot study explored for indications to apply in the research, a more thorough development of questionnaire instruments based on clear constructs was required in the main study to establish reliable and valid empirical evidence. Hence where practical, the researcher looked to well-established scales for measuring the variables in the research theory.

Finally, given that some of the most important findings in the pilot study were from the informal discussions held with candidates, the proposal to conduct both quantitative and qualitative research was further endorsed.

## **6.7 Development of the Formal Research Theory**

In chapter five, the literature synthesis led to the basic research model, which contained five propositions relating to the effects of EPIs on the alignment of frontline performance with organisational strategy. Frontline performance was considered in terms of task, contextual and adaptive performance.

The exploratory pilot study identified suitable EPIs for the main study including promotion, commendations and letters of appreciation, and appraisal reports. In addition, the use of ERI was considered as an exploratory way to address the research question.

The pilot study further indicated that contextual performance should be subdivided into the separate constructs of OCBO and OCBI. Also, the pilot study indicated that whilst individual performance is affected by EPIs, correlations can be both positive and negative. Hence, the formal research theory has been extended to reflect this two-way possibility.

The propositions in the basic research theory based on the literature synthesis were:

*P1 - There is a relationship between EPIs and organisational alignment in which greater expectancy of EPIs is associated with greater organisational alignment and more recent realisation of EPIs is associated with greater organisational alignment.*

*P2 - There is a relationship between EPIs and task performance in which greater expectancy of EPIs is associated with higher task performance and more recent realisation of EPIs is associated with higher task performance.*

*P3 - There is a relationship between EPIs and contextual performance in which greater expectancy of EPIs is associated with higher contextual performance and more recent realisation of EPIs is associated with higher contextual performance.*

*P4 - There is a relationship between EPIs and adaptive performance in which greater expectancy of EPIs is associated with higher adaptive performance and more recent realisation of EPIs is associated with higher adaptive performance.*

*P5 - There is a relationship between individual performance and organisational alignment in which higher individual performance is associated with greater organisational alignment.*

The research question remains the same:

*How do extrinsic performance incentives affect the alignment between frontline police performance and police strategy?*

Continuing to follow the logic of the research process suggested by De Vaus (2002, p16), the literature review synthesis and the findings of the pilot study, the basic research theory was refined into a set of operational hypotheses for quantitative testing, whilst the broader research question will be explored in the semi-structured interviews. The following formal research theory, comprising operational hypotheses and a formal research model for testing, is based on the developments of the research propositions already covered in chapter 5 (pp. 61-66).

### ***Hypothesis 1***

Whilst there are some contradictory theories and limited empirical evidence positively linking EPIs with organisational alignment (e.g. Labovitz and Rosansky, 1997; Colvin and Boswell, 2007), there appears to be a greater proportion of the literature supporting the proposition that an increased realisation or expectation of EPIs will lead to improved organisational alignment. This is further supported by initial indications in the pilot study, hence, it is hypothesised that:

*H<sub>0</sub>: EPIs will be positively related to organisational alignment*

*H<sub>1</sub>: EPIs will not relate to organisational alignment*

### ***Hypothesis 2***

The literature gives strong support for the proposition that increased realisation or expectation of EPIs will result in improved task performance (e.g. Condly *et al.*, 2003; Manolopoulos, 2008), despite reservations from some researchers (Deci *et al.*, 1999). The findings of the pilot study suggest that frontline staff will work harder on activities that are recognised by the promotion and reward system, hence, it is hypothesised that:

*H<sub>0</sub>: EPIs will be positively related to task performance*

*H<sub>1</sub>: EPIs will not relate to task performance*

### ***Hypothesis 3a***<sup>\*</sup>

In the early literature, OCB was considered to be independent of the influence of rewards (Organ, 1988) and some research found the relationship between EPIs and OCB could be positive or negative, moderated by a worker's value commitment (Deckop *et al.*, 1999). However, in more recent years, it has been recognised that EPIs are effective in influencing OCB, and that OCB is being recognised in reward systems (Korsgaard, 2010). Furthermore, based on Williams and Anderson (1991) and on the

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<sup>\*</sup> 3a and 3b are used to maintain alignment with the basic research theory.

indications from the pilot study, OCBO should be distinguished from OCBI (Podsakoff *et al.*, 2009). Hence, the third operational hypothesis is:

H<sub>0</sub>: *EPIs will be positively related to OCBO*

H<sub>1</sub>: *EPIs will not relate to OCBO*

### ***Hypothesis 3b\****

Following on, the next operational hypothesis is:

H<sub>0</sub>: *EPIs will be positively related to OCBI*

H<sub>1</sub>: *EPIs will not relate to OCBI*

### ***Hypothesis 4***

Adaptive performance is becoming an accepted element of the individual performance model and is implicitly rewarded through workers' performance assessments (Schmitt *et al.*, 2003). However, the researcher is not aware of any research that links EPIs to adaptive performance. Without a specific lead from the literature, but drawing on broad indications from the pilot study, hypothesis 4 is:

H<sub>0</sub>: *EPIs will be positively related to adaptive performance*

H<sub>1</sub>: *EPIs will not relate to adaptive performance*

### ***Hypothesis 5***

This research has drawn upon concepts from the literature to describe a model of alignment between organisational strategy and individual performance. The measures used for each construct in the model are either drawn directly from the literature, or where necessary newly developed but based on the literature. Hypothesis 5 completes the formal research theory by testing for alignment between measures of organisational alignment and individual performance in the case study organisation.

$H_0$ : Organisational alignment will be a function of individual performance

$H_1$ : Organisational alignment will not be a function of individual performance

## 6.8 Formal Research Model

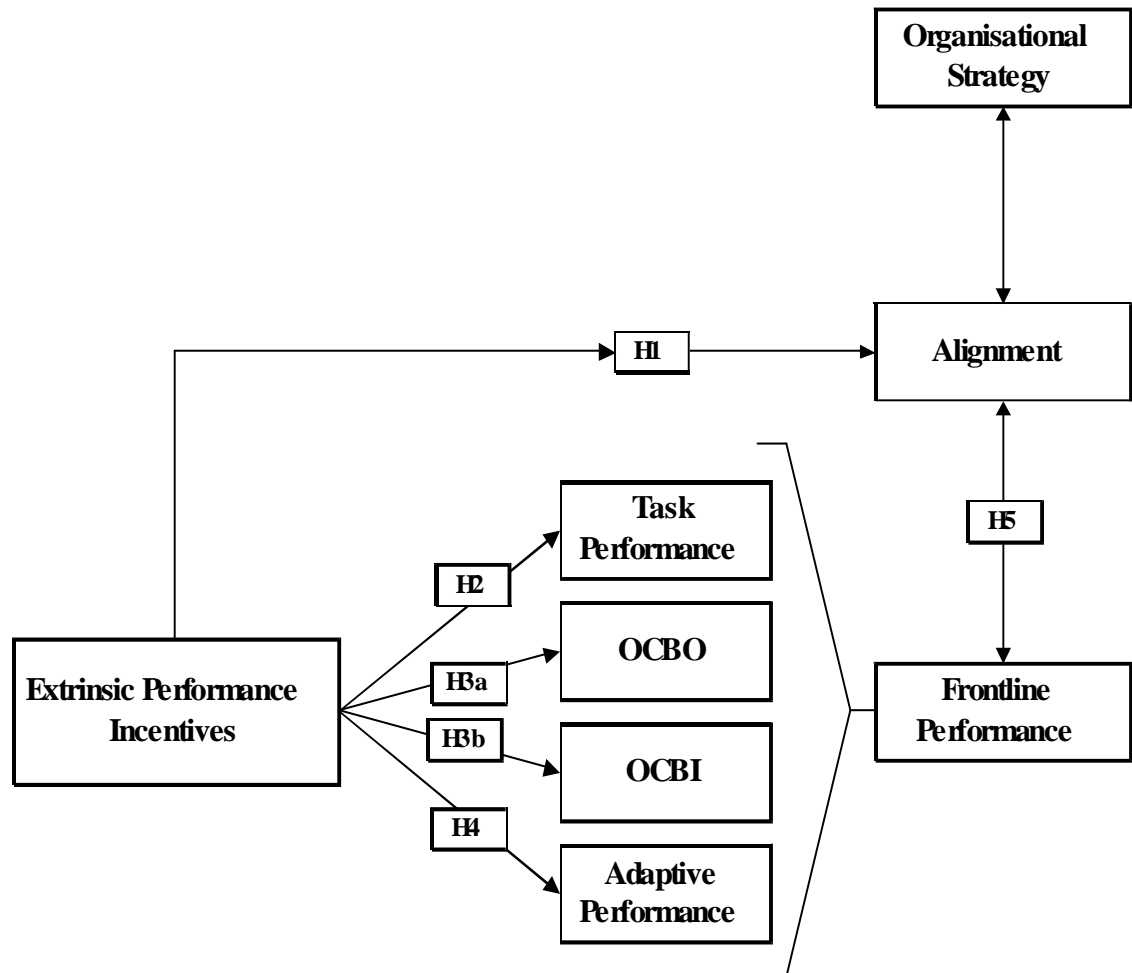


Figure 6.3 - Formal Research Model

## 6.9 Summary

The pilot study provided some grounding for the main study and further research into how extrinsic performance incentives affect the alignment of frontline performance and strategy in policing. Promotion, commendations and letters of appreciation have a considerable part to play in motivating police officers. One of the focuses of the main research was how the promotion system and career concerns affect the alignment of



activities and strategy. The performance appraisal system is not only part of the promotion system but has a significant role as a performance incentive. The possibilities of gaming, the ratchet effect (Ickes and Samuelson, 1987) and other dysfunctional behaviour were further explored. Effort-reward imbalance also offered a potentially insightful way to conceptualise the individual differences aspects of EPIs when addressing the research question.

Based on the findings in the pilot study and on discussions with the candidates that participated, the basic research theory was modified and developed into the formal research theory with six hypotheses for testing, with the original basic research theory propositions for exploration in the main study.

The methodology used in the pilot study was somewhat successful for the purpose of exploration and there were several lessons learned. In particular, the value of discussions was such that the plan for the main study to include both questionnaires and semi-structured interviews was endorsed.

The next chapter sets out the research method used for the main study.

## CHAPTER 7

### RESEARCH METHOD

This chapter details the research method for the main study. The methodology was developed from the literature review and influenced by the findings of the pilot study. It was aimed at producing empirical evidence with a high degree of quality that could be used to test the operational hypotheses and explore the research question. Section 7.1 introduces the research paradigms adopted and explains the rationale for the choice of approach for this research. The next section presents the research design employed and introduces the case study, the units of analysis used, and the concepts of quantitative and qualitative research. Sections 7.3 and 7.4 introduce the reliability, validity, generalisability, triangulation, accessibility and ethical considerations of the research. The next section covers the questionnaire in some detail and includes the development and characteristics of the measurement instruments employed. Section 7.6 sets out the sample design and the data collection process, and section 7.7 presents the questionnaire results analysis method. Sections 7.8 and 7.9 detail the semi-structured interview process and present how findings will be analysed.

#### 7.1 **Research Paradigms**

A paradigm is a particular standpoint from which we view the world and organise our observations. It is important that research is conducted with a clear understanding of the paradigm so that research findings *make sense* in the real world (Babbie, 2005).

##### 7.1.1 **Positivist Paradigm**

The positivist paradigm is associated with a normative, scientific, quantitative approach which asserts that the world can be analysed and understood objectively and logically. Positivists seek to discover the reality of the world by establishing laws of regularity based on reliable and valid *facts*, and they assert that intangible and subjective evidence is meaningless (Roberts *et al.*, 2003a; Neuman, 2007).

Whilst the positivist paradigm has dominated research in the natural sciences for many years, in social science, where reality and perceptions of reality depend on the beliefs, values and ideologies of those involved in the research, the approach has been challenged as not presenting the full picture (Babbie, 2005). To address this challenge to the positivist paradigm, the phenomenological paradigm is often adopted.

### 7.1.2 Phenomenological Paradigm

The phenomenological paradigm takes the standpoint that the *facts* about the world as established by positivists are not fully aligned with the *reality* of the world that we experience. The aim of research in the phenomenological paradigm is to interpret the context, meanings, values and attitudes of the social world as a set of subjective experiences. The phenomenological researcher hopes to understand the full context of how and why things happen as they are observed (Neuman, 2007).

Research adopting the phenomenological paradigm largely relies on qualitative data. Data sources might include personal experiences, interpretations of interviews, biographies, observations and historical records, all of which can be used collectively to build and describe a picture of the real world as a social construct (Roberts *et al.*, 2003a; Neuman, 2007).

In recent years, the phenomenological approach has received greater acceptance in managerial disciplines as scientific research sometimes fails to represent the behaviours and practices of *hands-on* management (Hummel, 1990). However, several challenges remain to the reliability of phenomenological research as it is generally subjective and often requires direct researcher interaction. Hence, several research texts recommend combining the positivist and phenomenological paradigms to improve the reliability and acceptance of the research (Babbie, 2005; Roberts *et al.*, 2003a).

### 7.1.3 A Combined Exploratory Approach

Exploratory studies are applicable when theories are under formulation and when new insights are required to reliably identify variables and measurements. They can be used

to establish research protocols and boundaries and they can give preliminary evidence to support theories (Forza, 2002).

This study is exploratory in that the research question begins with ‘*how*’ and as a result of the rigorous literature review and an exploratory pilot study, a formal research theory has been formulated that is supported by a number of operational hypotheses.

The combined approach adopts both a positivist deductive methodology to identify any correlations between the constructs that represent variables in the hypotheses, and a phenomenological methodology, using both deduction and induction, for triangulation and to research the context, attitudes and values that might indicate causality and reveal more in-depth answers to the research question. In essence, the positivist methodology answers the ‘*what*’ questions implicit in the research question, whereas the phenomenological methodology answers the explicit ‘*how*’ and the implicit ‘*why*’ questions (Roberts *et al.*, 2003a; Yin, 2003). Whilst the majority of research in this field has relied on a single approach, there are several similar studies that have adopted a combined approach, using both questionnaires and interviews (e.g. Pain and Organ, 2000; Paleologou *et al.*, 2006).

## **7.2 Research Design**

### **7.2.1 Case Study**

This research comprises a case study designed to expand on existing understanding of *complex social phenomena*, without seeking to control, or experiment with individual performance and attitudes. Eisenhardt (1989b, p.534) describes the case study as “*a research strategy which focuses on understanding the dynamics present within single settings*”. Yin (2003, p.7) states that case studies are suitable for *how* and *why* questions and are “*preferred in examining contemporary events, but when the relevant behaviours cannot be manipulated*”.

Case studies are used to provide evidence of a theory that has been developed prior to data collection or to generate grounded theories during the research (Berg, 2007). This study adopts both approaches with the aim of testing research hypotheses developed

from the literature review and pilot study, and of exploring causal linkages and explanations (Yin, 2003). Case study research can provide much more compelling support for a theory than might empirical quantitative research (Siggelkow, 2007).

The case study methodology adopted is somewhat similar to the approach suggested by Otley (1999) in which he proposed that an in-depth study and a survey of a single organisation could lead to inductive generalisations. Another similar approach was used by McAdam and Bailie (2002) to explore the successes that a single organisation had after adopting a series of performance improvement systems. A number of other studies have adopted single case settings for quantitative and/or qualitative surveys in order to conduct exploratory research into various aspects of organisational alignment, for example Hanna *et al.* (2000), Gagnon and Michael (2003), Schneider *et al.* (2003), Avison *et al.* (2004), Decoene and Bruggeman (2006) and Dickson *et al.* (2006).

#### 7.2.2 The Case - Hong Kong Police Force

The case study research involved the Hong Kong Police Force (the Force) as a single case setting, although the primary unit of analysis was the individual officer. Whilst in-depth multiple cases are more compelling (Eisenhardt, 1989b), access to certain types of organisation for conducting research, including police forces, is relatively rare. In such circumstances, the single case study is justifiable, particularly where dual paradigms and combined methods are used to increase the robustness of the research (Dyer and Wilkins, 1991; Yin, 2003).

The Force dates back to 1844 when it was established as a colonial police force under British rule. Today, the Force serves the Hong Kong Special Administrative Region of the People's Republic of China - a society of around seven million people predominantly of Chinese ethnicity - under a '*one country, two systems*' arrangement.

*"The Hong Kong Police is one of the best-trained, most highly motivated and dedicated police forces in the world. International law enforcement bodies rank it among the most professional of its kind."*

(HKPF, 2009)

The Force has a staff of more than 36,000 personnel made up of permanent sworn officers - frontline and support, civilian support staff and part-time auxiliary police officers. Frontline officers number around 24,600, structured into six regions with 20 land-based and two marine-based frontline police districts. The *frontline* comprises a wide range of officers of different ranks and roles; hence this study has established a clear definition of frontline for the unit of analysis.

### 7.2.3 Unit of Analysis

The research population comprises serving frontline Hong Kong Police officers with the unit of analysis of the individual officer. *Frontline*, in the numbers presented by the Force, includes officers of frontline units that have administrative duties. Furthermore, worldwide there are many very different definitions of frontline police. For example, frontline policing measures in the England and Wales Police have at times specifically excluded uniformed visible crime prevention (beat) patrols from defined frontline activities (Home Office, 2005) - a well-established strategy for crime prevention which is arguably a primary function of frontline police. To avoid ambiguity and the researcher's predisposition, *frontline* was defined for this study with the assistance of candidates on the pilot study as:

*Officers of the rank of Constable to Chief Inspector in the roles of uniformed patrol duties, district criminal investigation teams, special duty squads dealing with vice, and operational traffic officers.*

Having more than one unit of analysis can improve the robustness of research by providing a tougher test and can increase the contribution of the research (De Vaus, 2002). In this study, the researcher looked to explore other potential units of analysis, particularly in the qualitative elements of the study in order to better address the research question and to propose further research.

### 7.2.4 Quantitative and Qualitative Methods

The literature review suggests that the majority of similar studies in the fields of organisational alignment, individual performance and EPIs have adopted quantitative

research methods, using questionnaires as the main research instrument (e.g. Helms, 2002; Gagnon and Michael, 2003; Joshi *et al.*, 2003; Chenhall, 2005; Dickson *et al.*, 2006). There are also several research studies in these fields that have adopted a qualitative approach using interviews (e.g. Franco and Bourne, 2003; Schneider *et al.*, 2003; Decoene and Bruggeman, 2006; Kelman, 2006).

The combined research method adopted in this research uses a questionnaire and semi-structured interviews. The qualitative approach enhances the quantitative research by interpreting the relationships between variables in the broader context (Roberts *et al.*, 2003b).

### **7.3 Reliability, Validity, Generalisability and Triangulation**

#### **7.3.1 Reliability and Validity**

The reliability of a study is the ability to replicate and repeat the research in terms of data collection and results (Babbie, 2005). Validity is the degree to which the evidence used to support a theory is true - whether “*the intended object of measurement is actually measured*” (Stenbacka, 2001; Fields, 2002).

There are three types of validity. *Construct validity* refers to the validity of the relationship between variables, *content validity* refers to the validity of the meaning of a measure, and *criterion-related validity* refers to comparisons with external standards or constructs (Berg, 2007; Neuman, 2007). Threats to validity include the alignment of the measurement instrument with what it intends to measure and the assignment of causation to linked relationships (Roberts *et al.*, 2003a).

To ensure an acceptable level of reliability and validity for the positivist element of the research, the quantitative questionnaire employed established scales and approaches wherever possible. Where items were reworded or new scales developed, the researcher maintained a high degree of integrity with the original constructs of the variable. Statistical tests of the scales were conducted to ensure that reliability attained an acceptable level (see section 7.5). Reliability and validity was further enhanced by

having developed and tested the wording of the questionnaire in conjunction with two senior ranking police officers.

In the phenomenological paradigm, research tends to deal with subjective perceptions and reliability and validity are difficult to establish objectively. Research aimed at supporting causal links carries inherent threats to validity and it has been argued that validity is not applicable to qualitative research (Golafshani, 2003; Yin, 2003). However, qualitative validity can be related to the rigour of research in terms of the procedures, skills and techniques used to facilitate open discussion and free information flow (Stenbacka, 2001).

The primary threats to reliability are subject error, subject bias, interviewer error and interviewer bias (Roberts *et al.*, 2003a). Hence, the quality of phenomenological research is largely dependent on the skills, credibility and neutrality of the interviewer in gaining the subject's trust (Berg, 2007). The researcher was cognisant that his position as a serving police officer may have influenced interviewees, causing them to respond to questions differently, but he also felt that on the positive side he was able to establish trust quicker than an *outsider* might. He was also aware that the interviewees were all experienced interviewers themselves. The researcher's awareness of the threats to reliability and validity guided his approach to interviews. It was felt that he was able to establish the proper researcher/subject rapport and he maintained the focus of discussions on the key research variables without controlling the interviewee, thus minimising challenges to the integrity and final contribution of the research (Berg, 2007).

### 7.3.2 Generalisability and Triangulation

There are two main issues with generalising case study research. The first is whether the sample can be generalised to the full population of the research case and the second is whether the case study research can be generalised to the wider world. Yin (2003) suggests that case studies can be used to develop theories about the case that can then be generalised.



Triangulation improves the reliability, validity and generalisability of research (Golafshani, 2003). Triangulation can be achieved by combining research methods, collecting research data at different times, employing multiple researchers, using alternative or competing theories and considering different settings for the research (Roberts *et al.*, 2003b).

Whilst a single case study has its limitations, it is the quality and depth of insight of the research that ensures the contribution to the body of knowledge on a subject is significant (Stenbacka, 2001; Forza, 2002). In this research, the formal research theory was developed from a rigorous literature review that drew on a wide range of research fields, disciplines, sources, organisations and countries. The concepts being explored and tested are generally well-established with a number of new insights gained that are firmly grounded in existing research, thus establishing triangulation.

The sampling in this research provides some further support for generalisation and the combined methodology adopted has been used to triangulate the research findings. Whilst additional triangulation is always desirable, access and the availability of resources have restricted the researcher beyond using multiple methods and a limited sample size. Nonetheless, this level of triangulation is a significant improvement over many of the research studies in the field of operations management, and there are indications that triangulation of any form appears in only about one-third of research that is published, even in quality journals (Malhotra and Grover, 1998).

#### **7.4 Accessibility and Research Ethics**

The researcher has signed a Confidentiality Understanding and Assignment of Ownership of Intellectual Property with the Heriot-Watt University. In addition, he has read and agreed to abide by the Postgraduate Research Student Code of Practice.

The case subject, the Hong Kong Police Force, has wide experience of academic research and has strict procedures in place to deal with approval and ethical issues. The researcher is currently a serving police officer in the Force and as such the integrity, openness and ethical considerations of the research are paramount. The researcher is bound by the Personal (Data) Privacy Ordinance and internal confidentiality

agreements. Whilst the researcher may have access to restricted sources of information in his professional duties, none has been used in the research without the prior permission of the relevant authority.

## **7.5 Questionnaire**

This research employed a questionnaire to test the six operational hypotheses of the formal research theory (see section 6.7, pp.78-82) and the approach has been to make use of self-reports of various established and non-established organisational behaviour characteristics that acted as instruments to measure variables in the formal research theory.

Self-reports have some limitations when compared with trained observer reports and they inevitably include numerous factors outside of those for which a questionnaire is designed, such as relationships with colleagues. However, self-reports can be used to gain insights into more holistic matters in the work environment (Spector, 1994). In order to balance the inherent weaknesses of self-report, the questionnaire included a number of items relating to peer behaviour observations which have been used for triangulation. Furthermore, the results of the questionnaire were used both to provide empirical evidence to test the formal research theory and as a guide for the semi-structured interviews in the main study.

The questionnaire, presented in both English and Chinese, comprised seven parts with a five-point Likert scale being used for the majority of items. It was prefaced with several background questions on the individual respondent, and main body was made up of 78 questions on various aspects of the research question (Appendix B).

The section preceding Part I provided a background to the research and the questionnaire, suggested the significance of the research, set out how the questionnaire was to be administered including confidentiality and data security, and gave some instructions and an example on how to fill out the questionnaire.

Part I comprised questions on demographic information such as gender, career-stream, length of service, rank, duration since a promotion, duration since a commendation or

similar award, and most recent annual report rating. Parts II to VII comprised the questions that made up the measures and scales used to address the variables in the formal research model.

#### 7.5.1 Measures and Scales

Each of the scales used in the study was tested for unidimensionality using an item to scale correlation coefficient, and for reliability using *Cronbach's alpha coefficient*. If an item had a correlation coefficient of less than 0.3 it was dropped from the scale. Where the alpha was greater than 0.7 the scale was considered reliable, which is in accordance with the generally accepted threshold of reliability (De Vaus, 2002). An alpha of between 0.6 and 0.7 meant the scale was considered marginally reliable, in line with some previous studies in this area (e.g. Tsui *et al.*, 1997; Joshi *et al.*, 2003).

#### 7.5.2 Extrinsic Performance Incentives

Based on the pilot study, the EPIs selected for further exploration were promotion, commendations and letters of appreciation, and annual appraisal report ratings. Whilst promotions at different ranks have slightly different implications, and commendations and letters of appreciation are given from various levels, some key variations are captured in these classifications. Promotion, for example, is very much an individual reward and it is the only EPI of those selected that carries with it a significant financial benefit through increased pay. So by distinguishing between promotion and other incentives, the possible effect of monetary over non-monetary rewards can be explored (Dermer, 1975; Allen and Kilmann, 2001; Marsden *et al.*, 2001; van Herpen *et al.*, 2006). Commendations and letters of appreciation are usually awarded for exceptional performance, both as an individual or as part of a team, whereas annual appraisal reports are individual and are routinely given. Furthermore, the number of promotions and awards given each year are relatively few, with promotions in particular based on pre-set vacancies due to staff turnover; hence, it was necessary to keep classifications broad.

In order to measure the EPIs several approaches were used. Promotions and commendations and letters of appreciation were initially quantified by referring to the

duration since the last occasion of receiving the EPI and the respondents' perception of their prospects of receiving the incentive in the future. This method of measurement mirrors that used by van Herpen *et al.* (2006) in their research on the relationship between promotion and extrinsic and intrinsic motivation. In addition, respondents were asked to provide their most recent annual appraisal report ratings.

The value placed on each EPI by the respondents was determined using the question,

*“In your case how important is the prospect of ..... for increasing your will to perform better at work?”*

(Paleologou *et al.*, 2006)

This approach was based on a study by Paleologou *et al.* (2006) in which job related aspects, including several EPIs, were related to performance improvements and motivation.

These two approaches were combined into a single measure of EPIs for each of promotion and commendations by calculating the product of the first measure and the value placed on the incentive, thus creating a variable that somewhat captures valence, instrumentality and expectancy (Vroom, 1964). Annual report ratings were used as a further measure and the concept of effort-reward imbalance (ERI) was used to represent the possible effect of EPIs (Siegrist *et al.*, 2004).

### 7.5.3 Effort-Reward Imbalance

The research question is somewhat exploratory in nature; hence the study was used to test the applicability of the concept of ERI for the research (see section 4.10, p.57).

The researcher felt that there was some scope to apply ERI to the research question by looking for correlations between the measures of EPIs, ERI and performance. In effect, ERI offered a further alternative approach to addressing the EPI element of the research question that encompasses equity, expectancy and individual differences.

A standard scale was used to measure ERI, using a five-point Likert scale where 1=*strongly disagree* and 5= *strongly agree* (Siegrist *et al*, 2004). The scale was established using the protocols set out in Siegrist *et al*. (2004) and comprised three sub-scales of effort, reward and overcommitment. Effort was measured on a five-item scale. Reward was measured in three dimensions; esteem rewards, promotion prospects and job security, using an 11-item scale. Overcommitment was measured using a six-item scale with questions such as, “*As soon as I get up in the morning I start thinking about work problems*”. Various studies using the ERI scale indicate that it has marginal to good reliability, with alphas ranging from 0.61 to 0.78 in a set of reviewed cases (Siegrist *et al*, 2004).

In this study, the ERI constructs had reliability in line with previous research. The effort scale had an alpha of 0.70 and the reward scale an alpha of 0.81 which are in line with or better than previous research. Overcommitment was a reliable scale with an alpha of 0.73. In all three scales, all items had correlation coefficients greater than 0.3.

ERI was determined by summing the various items and then applying the equation:

$$ERI = Effort / (Reward * 0.454545)$$

(Seigrist *et al.*, 2004)

#### 7.5.4 Organisational Alignment

Three scales were used to measure aspects of organisational alignment using a similar five-point Likert scale. The first measure used a seven item strategy acceptance scale based on Bouillon *et al*. (2006). The strategy acceptance scale measures the respondents' perception of the alignment of the actions and communication of both senior management and frontline employees with the organisational strategy. Bouillon *et al*. (2006) found the scale to be valid and reliable with a Cronbach's alpha of 0.82. In the research questionnaire, the specific wording of the questions used was slightly adjusted from the original to suit the culture and language used by police officers.

The second measure was based on a scale of organisational alignment used in Gagnon and Michael (2003). The original scale was developed to measure employee aligned behaviour in a manufacturing company that had adopted a new strategy of lean production. In the questionnaire, the scale was modified to include 11 items measuring strategically aligned actions, based on behaviours that are consistent with the organisational strategy, and measuring strategic knowledge, based on micro knowledge of the strategy and macro knowledge of why the strategy has been adopted.

The third scale comprised four questions included in the questionnaire that directly addressed the effects on EPIs on the alignment of the work behaviour of peers. The first question assessed the perceptions that certain EPIs had a positive effect on colleagues' work behaviour. The next three questions asked how the same incentives affected colleagues' alignment with the Force Vision, and Statement of Common Purpose and Values (HKPF, 2008). A similar approach has been used by Cable and Judge (1996) in their scale for Person-Organisation Fit, which was based on three questions and had a reliability Cronbach's alpha of 0.87 (Fields, 2002, p.227).

The three scales used in the questionnaire represent a balance of scales, with one that is well-established in the literature and covers broadly relevant topics (Cable and Judge, 1996), one with more specific applicability in terms of organisational alignment but slightly less established (Bouillon *et al.*, 2006) and a relatively new scale that is highly specific to the researcher's needs (Gagnon and Michael, 2003).

In this research the seven-item strategy acceptance scale returned an alpha of 0.82. The 11-item organisationally aligned behaviour scale indicated high reliability with an alpha of 0.78. The four-item organisational alignment of colleagues had a Cronbach's alpha of 0.92. All three scales had item to scale coefficients above 0.3 for all items.

Whilst the correlation between the three scales used to measure organisational alignment was strong and significant at the 0.01 level, it was decided that further analysis would continue to explore the three scales relating to organisational alignment separately.

#### 7.5.5 Task Performance

Task performance was measured using a self-rating version of the in-role behaviour (IRB) scale developed by Williams and Anderson (1991). The five-point Likert scale comprises seven items and presents statements relating to behaviours that are generally recognised and rewarded as part of normal job duties. The scale has been extensively used and has recorded high reliability, with alpha values between 0.80 and 0.94. Self-rating of in-role performance has been shown to have a positive correlation with peer rating (Fields, 2002, p.240).

In this study the IRB scale returned a marginally lower reliability than previous studies with the alpha of the seven-item scale at 0.74, with all items with a correlation coefficient above 0.3.

#### 7.5.6 Contextual Performance

Contextual performance was measured using two further scales from Williams and Anderson (1991). Organisational citizenship behaviours were measured for both behaviours directed at individuals (OCBI) and behaviours directed at the organisation (OCBO). The scale comprises seven items for each of OCBI and OCBO and uses a five-point Likert scale similar to the IRB scale. The reliability of the scales in previous studies has been reasonable to good, ranging from 0.61 to 0.88 for OCBI and from 0.70 to 0.75 for OCBO. A study by Funderburg and Levy (1997) indicated that self-rated studies of OCBI may return reversed correlations from peer ratings (cited in Fields, 2002, p.241).

In this research, the OCBO scale had a relatively poor reliability of 0.57, which is below the marginal extremes of acceptability. After the removal of two items with correlation coefficients below 0.3, the reliability improved to 0.59 which differs from previous studies and is slightly below the desired threshold. With this in mind, the study continued with the modified five-item OCBO scale, but the interpretation of any noteworthy results would be made with due caution. The full OCBI scale had an alpha of 0.66 however, after the removal of a single item that had a correlation coefficient below 0.3 the alpha was increased to 0.79.

#### 7.5.7 Adaptive Performance

The literature presented no suitable established scale for measuring adaptive performance. Hence, a new scale was developed by the researcher that was aligned with the eight item constructs of adaptive performance from Pulakos *et al.* (2000) and with the format and style of the instruments used for IRB, OCBO and OCBI. The scale comprises eight items, each representing one of the dimensions of adaptive performance, using the same five-point Likert scale as a self-rating. Questions had the same general *feel* as the other dimensions of individual performance, such as, '*I can adapt to the different physical challenges of various postings*' and '*I take the stress of work in my stride*'.

In the study, the full scale returned a reliability alpha of 0.65. After removing two items, each of which had poor item to scale unidimensionality, the reliability was increased and an alpha of 0.74 was attained.

#### 7.5.8 Testing the Questionnaire

Prior to making the questionnaire available for the study, the wording of the introductory remarks, instructions and questions was reviewed for any ambiguity in both English and Chinese, and they were fine-tuned and endorsed by two serving Senior Superintendents of Police, both of whom having extensive experience of managing and communicating with frontline police officers. The questionnaire was then prepared in an electronic format using the Force intranet for access. The questionnaire and the electronic system were tested for clarity, operability, reliability and user-friendliness by several of the researcher's close colleagues. After testing, the questionnaire was released to the research sample.

### 7.6 Sample Design and the Data Collection Process

The main aim of sampling is to make the research practical whilst maintaining a level of integrity in the findings (De Vaus, 2002). There is an ethical challenge in business and management research to balance the power of the research with the burden that it places on individual candidates and participant organisations. Furthermore, as the demand for



research subjects increase, so too must the responsibility to conduct optimal quality rather than maximal research in order to preserve the research environment (Bacchetti *et al.*, 2005).

A suitable research sample size depends on a number of factors including accuracy, variation within the sample, sub-groups to be analysed, time and resources (De Vaus, 2002; Robert *et al.*, 2003b). Based on a confidence interval of 5% and a confidence level of 95% with a population of 24,600 the recommended minimum sample is  $384^2$ .

A total of 1000 frontline officers, representing a broad cross-section of seniority, functions and backgrounds, were randomly invited to participate in the questionnaire through a coordinating officer from within each frontline formation. The officers' involvement was entirely voluntary and they were assured anonymity and confidentiality. Based on this sample, 453 web-based electronic questionnaires were completed of which 436 were usable. This sample size satisfies the above recommendation and meets the requirements for regression analysis of a minimum of five cases for each independent variable (Tabachnick and Fidell, 1989).

The sample size in this research compares favourably with many peer-reviewed and doctoral studies in which the survey sample is far fewer than 1000 or the response rate was much lower than in this study, producing only around 100-200 usable responses (e.g. Papke-Shields and Malhotra, 2001; Pitinanondha, 2008; AlMamaari, 2009; Ma, 2009). The response rate of 45.3% is in line with expectations based on the findings of Baruch and Holtom (2008) in their meta-study of response rates in organisational research.

## **7.7 Questionnaire Results Analysis**

Analysis of the questionnaires was conducted using the Statistical Package for the Social Sciences Version 16.0 (SPSS). Initially, descriptive statistics were generated and the items of the various scales were tested for unidimensionality and the scales tested for reliability, with outcomes as described above.

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<sup>2</sup> Using ' $n = z^2 pq / L^2$ ' where  $z$  is the value of the  $z$  statistic for a given level of confidence,  $p$  is the proportion with a particular characteristic,  $q$  is the proportion without that characteristic, and  $L$  is the required level of accuracy' (Roberts *et al.*, 2003b).

The formal research theory and operational hypotheses were tested by calculating correlations of the variables in the research model for the survey sample as a whole. Hierarchical regression analysis was conducted to test the percentage of variability in the dependent variable that could be accounted for by the independent variables and to look further at correlations. The most rigorous application of such statistical techniques usually relies on the data being normally distributed and strictly interval; however, this would effectively eliminate a significant amount of valuable research in the literature (Norman, 2010). Whilst the quantitative data in this research were collected using Likert scales, which are clearly ordinal with intervals that cannot be treated as equal, it has become conventionally accepted that multiple-item Likert scales are sufficiently close to interval scales to justify the use of more powerful statistical tools such as regression analysis (De Vaus, 2002).

Mediation was tested with regards to each of the variables using the four-step procedure proposed by Baron and Kenny (1986). Finally, the variables were tested for common method variation using Harman's one-factor test (Podsakoff and Organ, 1986). The results and analysis of the questionnaire can be seen in Chapter 8.

After the results of the questionnaire were analysed, the formal research theory and new findings were explored in the qualitative element of the research using semi-structured interviews. This exploration included the closer consideration of various sub-groups of a frontline officer's career stage to determine the significance and relationship of any moderating factors to the theory.

## **7.8 Semi-structured Interviews**

To combine the quantitative questionnaire approach with qualitative exploratory research, the main study comprised a number of semi-structured interviews with frontline police officers. Interviews are purposeful discussions that can be structured, semi-structured or unstructured. They are an effective technique for gaining an understanding of individual perceptions and of complex issues, and they afford an opportunity to develop detailed explanations of phenomena (Roberts *et al.*, 2003b). Whilst interviewing is considered to be a valuable tool in qualitative research, it is

relatively time consuming, researcher influence may be high and access to interview subjects can be difficult (Berg, 2007).

Semi-structured interviews maintain a clear purpose through a set of pre-set questions and yet have the flexibility to expand on items and explore new avenues in the research (Berg, 2007). In settings where language may need clarification and concepts are to be considered from the interviewee's perspective, semi-structured interviews are particularly suitable (Berg, 2007). The use of semi-structured interviews in this research is compatible with some similar qualitative studies into aspects of organisational alignment, for example Franco and Bourne (2002) and Decoene and Bruggeman (2006).

An additional challenge with this research case study was the varying language requirements at different levels of the subject organisation, with some Junior Police Officers speaking only Cantonese, whilst higher ranks are generally fluent in English and Cantonese. To address potential issues with language, interviews were held in English with officers and commanders of frontline units who were fluent in English.

In the study, five semi-structured interviews were conducted, three with frontline police officers of the rank of Senior Inspector and two with Constables. The purpose of the interviews was to elicit officers' perceptions of the effects that EPIs have on their colleagues' or subordinates' alignment with the organisational strategy in terms of their behaviour and attitudes. The sample was small but the quality of feedback was relatively high and with the combined approach, the quality of research information was high. In related topics, there have been several similar studies with interview sample sizes ranging from as few as four to 10 interviews (Decoene and Bruggeman, 2006; van Herpen *et al.*, 2006; Schwartz *et al.*, 2007).

The opening of the interviews was structured to extract the same background information about each interviewee as was collected in the main study questionnaire, namely: the professional work stream (uniform or criminal investigation), length of service, duration since promotion and commendations and awards, if any, and most recent annual report grading. Furthermore, the interviewees were asked to indicate the

value they place on the importance of the three main EPIs covered in the study in making their colleagues perform better at work.

Essential questions were aimed at covering each of the direct relationships between the variables in the formal research theory and were structured around the effects that EPIs have on the interviewees' colleagues work behaviour. Probing questions for the semi-structured interviews were used to tease out interesting anecdotal examples of behaviour and performance that both represent and illustrate the general findings of the research (Berg, 2007).

The outline question schedule was as follows (also at Appendix C):

*Describe the effects that the prospect of promotion, commendations and letters of appreciation, and annual appraisal report ratings have on your colleagues' work behaviour.*

*Do the prospects of promotion, commendations and letters of appreciation and good annual reports have the same effects on your colleagues' work behaviour? Can you describe any specific differences in behaviour?*

*Amongst your colleagues, are those with high prospects of promotion more focused on any particular aspect of work? How do they compare with those colleagues who have fewer prospects? For example, in respect of:*

*tasks in their job description,*

*complying with organisational directions and values,*

*helping their colleagues, or*

*learning how to do new things for work.*

*Are promotions, commendations or letters of appreciation good motivating tools?*

To conclude the interviews, participants were asked if they had any comment they wished to make regarding the issues discussed or the interview procedure. The interviews ranged in duration from 25 minutes to one hour and 15 minutes. The interview transcripts are at Appendix D.

## **7.9 Semi-structured Interview Analysis**

The analysis of the qualitative interview data was aligned with the phenomenological paradigm in that the researcher reviewed and organised the responses to questions to reveal patterns that support evidence of causality in the correlations being explored (Berg, 2007). Key concepts and themes were identified from the interview transcripts. Based on this concept mapping, representative quotes were selected by the researcher to illustrate the patterns of perceptions identified (Babbie, 2005).

## **7.10 Summary**

This chapter presents the research method used for the main study. A combined approach was adopted for the research using positivist and phenomenological paradigms. The exploratory research was conducted using the Hong Kong Police Force as the case study, with quantitative and qualitative research methods being adopted. A comprehensive questionnaire was developed from the literature using both established and newly developed scales to measure the variables in the formal research theory. Scales were tested and fine-tuned to establish acceptable unidimensionality and reliability.

Semi-structured interviews were held based on the literature review but developed in line with the results of the main study questionnaire. The data from the interviews was analysed using concept mapping and presented as a series of quotations that represent the qualitative findings of the research.

The next chapter presents the results of the questionnaire and the findings of the semi-structured interviews.

## CHAPTER 8

### RESULTS

This chapter introduces the results of the main study. Section 8.1 presents the questionnaire results and quantifies the correlations in the operational hypotheses from the formal research theory and section 8.2 reports the findings of the semi-structured interviews. Section 8.3 covers the synthesis of the results and findings.

#### 8.1 Questionnaire Results

##### 8.1.1 Demographic Data

In terms of the characteristics of the questionnaire respondents, 39.7% were Police Constables, 44.4% were Non-commissioned Officers of the ranks of Sergeant or Station Sergeant and 15.8% were Inspectorate Officers. The Hong Kong Police Force has a two-tiered entry system, in which officers can be recruited as constables, who may be promoted *through the ranks*, or officers are recruited directly as inspectors, hence inspectors may or may not have been promoted to their rank. The respondents had an average length of service of 18.1 years (standard deviation 9.76). Male officers made up 80.5% of the respondents and 79% were from uniform branch duties, with 18% from crime stream and 3% from other frontline duties.

Table 8.1 shows the means, standard deviations and correlations of the measures for organisational alignment, individual performance and EPIs.

Correlations														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. GOALCON														
2. ALIGNMT	.477 <sup>**</sup>													
3. COLALIGN	.484 <sup>**</sup>	.440 <sup>**</sup>												
4. IRB	.130 <sup>**</sup>	.387 <sup>**</sup>	.244 <sup>**</sup>											
5. OCBO	.122 <sup>**</sup>	.496 <sup>**</sup>	.234 <sup>**</sup>	.457 <sup>**</sup>										
6. OCBI	.278 <sup>**</sup>	.535 <sup>**</sup>	.384 <sup>**</sup>	.516 <sup>**</sup>	.441 <sup>**</sup>									
7. ADAPT	.338 <sup>**</sup>	.514 <sup>**</sup>	.355 <sup>**</sup>	.620 <sup>**</sup>	.395 <sup>**</sup>	.717 <sup>**</sup>								
8. ERI	-.462 <sup>**</sup>	-.264 <sup>**</sup>	-.263 <sup>**</sup>	-.125 <sup>**</sup>	.000	-.035	-.216 <sup>**</sup>							
9. OVERCOM	-.031	-.081 <sup>*</sup>	.030	-.085 <sup>*</sup>	.025	.107 <sup>*</sup>	-.101 <sup>*</sup>	.441 <sup>**</sup>						
10. APROVALI	.090 <sup>*</sup>	.167 <sup>**</sup>	.106 <sup>*</sup>	.077	.087 <sup>*</sup>	.226 <sup>**</sup>	.155 <sup>**</sup>	-.015	.126 <sup>**</sup>					
11. EPROVALI	.017	-.036	.150 <sup>**</sup>	-.018	.043	.020	-.068	.041	.009	.301 <sup>**</sup>				
12. ACOMVALI	.160 <sup>**</sup>	.055	.123 <sup>**</sup>	.057	-.028	.124 <sup>**</sup>	.096 <sup>*</sup>	-.090 <sup>*</sup>	.141 <sup>**</sup>	.238 <sup>**</sup>	.148 <sup>**</sup>			
13. ECOMVALI	-.048	-.066	.042	.048	.040	.004	-.076	.069	.055	.189 <sup>**</sup>	.293 <sup>**</sup>	-.038		
14. ARF	.069	.116 <sup>**</sup>	.119 <sup>**</sup>	.157 <sup>**</sup>	.042	.175 <sup>**</sup>	.202 <sup>**</sup>	-.049 <sup>**</sup>	.067	.126 <sup>**</sup>	-.095 <sup>*</sup>	.180 <sup>**</sup>	.099 <sup>*</sup>	
Mean	3.40	3.74	3.70	3.62	3.85	3.90	3.77	1.18	3.28	5.34	13.58	10.08	9.75	4.69
Standard Deviation	.57	.48	.77	.48	.51	.46	.46	.35	.65	7.21	6.34	9.29	6.78	.56

\*  $p < 0.05$  \*\*  $p < 0.01$  (1-tailed)

Table 8.1 – Descriptive and Correlation Results

### 8.1.2 Hypothesis 1

#### ***Hypothesis 1***

*H<sub>0</sub>: EPIs will be positively related to organisational alignment*

*H<sub>1</sub>: EPIs will not relate to organisational alignment*

The first measure of EPIs tested in this study was ERI. The results showed a significant substantial negative correlation at the 0.01 level between ERI and organisational alignment in terms of goal congruence using the strategy acceptance scale, and moderate significant negative correlations between ERI and both strategically aligned behaviour and colleagues' aligned behaviour, also at the 0.01 level of significance.

In terms of the other EPIs measured, significant slight positive correlations are seen between realised promotions and all three measures of alignment, and between realised commendations and both goal congruence and colleagues' aligned behaviour. Annual report ratings had significant slight correlations with both strategically aligned behaviour and colleagues' aligned behaviour at the 0.01 level, but had no correlation with goal congruence. Expectation of EPIs had no significant correlations with organisational alignment apart from a significant slight positive correlation between expectations of promotion and colleagues' aligned behaviour.

Hierarchical regression was carried out using six blocks, with the results shown at table 8.2, and more complete statistical results presented at Appendix E. The first two models regressed the potential control variables that were collected in the questionnaire but were not in the research model, to test their effect on the research model. The third model regressed the annual report rating. The fourth model regressed expectations of EPIs, as these had slight or no correlations with EPIs. The fifth model regressed the realised EPIs, and the sixth model regressed ERI which had the most substantial significant correlations with the organisational alignment variables.

In hierarchical regression, the value of R<sup>2</sup> indicates the percentage of variation in the dependent variable that is accounted for by variation in the independent variables in the model at each stage of the regression. Hence it is possible to determine the effect of the



introduction of additional independent variables in each block, indicated by the change in  $R^2$  ( $\Delta R^2$ ).

The value of  $\beta$  is the degree of impact that an independent variable has on the dependent variable. The measure is standardised in order to be able to make direct comparisons of different scales possible, such that  $\beta$  is the number of standard deviations variation in the dependent variable per standard deviation change in the independent variable (De Vaus, 2002).

The results indicate that with a  $\Delta R^2$  of 0.225, ERI accounted for 22.5% of the variation in goal congruence; with a  $\Delta R^2$  of 0.051, ERI accounted for 5.1% of the variation in strategically aligned behaviour; and with a  $\Delta R^2$  of 0.086, 8.6% of the variation in colleagues' aligned behaviour, all significant at the 0.001 level.

A one standard deviation increase in ERI resulted in a decrease in goal congruence of 0.543 standard deviations ( $\beta = -0.543$ ). Similarly, a one standard deviation increase in ERI resulted in a decrease in strategically aligned behaviour of 0.258 standard deviations ( $\beta = -0.258$ ), and a 0.335 standard deviations decrease in the perception of colleagues' aligned behaviours ( $\beta = -0.335$ ).

These results indicate that higher levels of ERI are associated with lower levels of alignment, which, given the nature of the reverse coding of ERI, supports hypothesis 1.

Realised EPIs accounted for 2.8% of the variation in goal congruence with the realisation of a commendation ( $\beta = 0.140$ ,  $p < 0.01$ ). Expectations of EPIs accounted for 2.7% of the variation in colleagues' aligned behaviours with the expectation of promotion significant at the 0.001 level with a  $\beta$  of 0.175.

Rank, which was the control variable introduced in block two, accounted for 7.5% of the variation in strategically aligned behaviour at the 0.001 level of significance with  $\beta$  at 0.276. The contribution to the model of other variables was either non-significant or trivial, at below 2%.

### 8.1.3 Hypotheses 2, 3a, 3b and 4

#### ***Hypothesis 2***

*H<sub>0</sub>: EPIs will be positively related to task performance*

*H<sub>1</sub>: EPIs will not relate to task performance*

#### ***Hypothesis 3a*<sup>\*</sup>**

*H<sub>0</sub>: EPIs will be positively related to OCBO*

*H<sub>1</sub>: EPIs will not relate to OCBO*

#### ***Hypothesis 3b*<sup>\*</sup>**

*H<sub>0</sub>: EPIs will be positively related to OCBI*

*H<sub>1</sub>: EPIs will not relate to OCBI*

#### ***Hypothesis 4***

*H<sub>0</sub>: EPIs will be positively related to adaptive performance*

*H<sub>1</sub>: EPIs will not relate to adaptive performance*

EPIs were correlated to the measures of IRB, OCBI, OCBO and adaptive performance. Referring to table 8.1, significant moderate negative correlations are seen between ERI and IRB and between ERI and adaptive performance, with no significant correlation with either OCBI or OCBO. Realised promotion had significant slight to moderate positive correlations with OCBI, OCBO and adaptive performance. Realised commendations had significant slight positive correlations with OCBI and adaptive performance. Annual report ratings had significant slight to moderate positive correlations with IRB, OCBI and adaptive performance. Expectations of EPIs had no significant correlations with measures of individual performance.

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<sup>\*</sup> 3a and 3b are used to maintain alignment with the basic research theory.

Model	GOALCON				ALIGNMT				COLALIGN			
	B	SE	Beta	R <sup>2</sup>	B	SE	Beta	R <sup>2</sup>	B	SE	Beta	R <sup>2</sup>
1 (Constant)	3.490	.144		.002	3.939	.119		.015	3.593	.193		.006
JOBSTR	.001	.057	.001		.083	.047	.086		.053	.077	.034	
GENDER	-.045	.070	-.031		-.077	.058	-.064		-.133	.094	-.069	
OVERCOM	-.024	.043	-.027		-.064	.036	-.087		.037	.058	.031	
2 (Constant)	3.508	.150		.002	3.740	.120		.090	3.562	.202		.007
JOBSTR	.002	.057	.002		.074	.046	.076		.051	.077	.033	
GENDER	-.048	.071	-.034		-.038	.056	-.032		-.127	.095	-.066	
OVERCOM	-.022	.043	-.025		-.079	.035	-.107*		.035	.058	.029	
RNK	-.010	.024	-.021		.114	.019	.276***		.017	.032	.026	
3 (Constant)	3.173	.275		.007	3.432	.218		.096	2.908	.367		.018
JOBSTR	-.013	.058	-.011		.061	.046	.063		.023	.078	.015	
GENDER	-.030	.072	-.021		-.021	.057	-.018		-.092	.096	-.047	
OVERCOM	-.025	.043	-.028		-.081	.034	-.109*		.030	.058	.025	
RNK	-.014	.024	-.027		.111	.019	.269***		.011	.032	.017	
ARF	.075	.051	.073		.068	.041	.080		.145	.068	.106*	
4 (Constant)	3.117	.286		.013	3.416	.227		.104	2.540	.378		.045
JOBSTR	-.020	.059	-.017		.050	.047	.052		.046	.078	.029	
GENDER	-.046	.073	-.032		-.038	.058	-.032		-.088	.096	-.046	
OVERCOM	-.021	.044	-.024		-.077	.034	-.103*		.025	.057	.021	
RNK	-.010	.024	-.021		.114	.019	.275***		.020	.032	.031	
ARF	.086	.052	.083		.078	.041	.091		.168	.068	.122*	
EPROVALI	.004	.005	.046		.002	.004	.027		.021	.006	.175***	
ECOMVALI	-.007	.004	-.082		-.007	.004	-.099*		-.004	.006	-.033	
5 (Constant)	3.317	.290		.041	3.539	.232		.116	2.649	.387		.051
JOBSTR	-.026	.058	-.022		.052	.047	.053		.041	.078	.026	
GENDER	-.021	.072	-.015		-.029	.058	-.024		-.073	.096	-.038	
OVERCOM	-.043	.043	-.049		-.087	.035	-.118*		.012	.058	.010	
RNK	-.023	.026	-.047		.098	.021	.238***		.016	.035	.024	
ARF	.050	.052	.048		.062	.042	.073		.146	.070	.106*	
EPROVALI	.000	.005	-.011		-.001	.004	-.016		.018	.007	.152**	
ECOMVALI	-.006	.004	-.067		-.007	.004	-.099*		-.003	.006	-.024	
APROVALI	.007	.004	.088		.007	.004	.112*		.003	.006	.025	
ACOMVALI	.009	.003	.140**		.002	.003	.034		.006	.004	.073	
6 (Constant)	3.728	.257		.266	3.702	.227		.167	2.990	.374		.137
JOBSTR	-.070	.051	-.060		.034	.045	.035		.005	.075	.003	
GENDER	-.054	.063	-.038		-.042	.056	-.035		-.100	.092	-.052	
OVERCOM	.186	.043	.209***		.004	.038	.005		.202	.063	.169***	
RNK	-.018	.023	-.036		.100	.020	.243***		.021	.033	.031	
ARF	.027	.046	.026		.053	.040	.062		.127	.066	.092	
EPROVALI	.002	.004	.023		-.000	.004	.000		.021	.006	.172***	
ECOMVALI	-.005	.004	-.056		-.007	.003	-.094		-.002	.006	-.017	
APROVALI	.004	.004	.047		.006	.003	.093		-.000	.006	.000	
ACOMVALI	.004	.003	.063		.000	.002	-.003		.002	.004	.026	
ERI	-.881	.077	-.542***		-.348	.069	-.258***		-.731	.113	-.335***	

\*  $p < 0.05$  \*\*  $p < 0.01$  \*\*\*  $p < 0.001$

Table 8.2 – Hierarchical Regression Results 1

In the hierarchical regression, the same six blocks were used to test hypothesis 2. Referring to tables 8.3 and 8.4, the results indicate that of the EPI variables, annual report ratings (ARF) accounted for 2.6% of the variation in IRB ( $\beta = 0.168$ ,  $p < 0.001$ ) and 2.7% of the variation in adaptive performance ( $\beta = 0.169$ ,  $p < 0.001$ ).

Realised EPIs accounted for 2.3% of the variation in OCBI with a realised promotion being significant ( $\beta = 0.146$ ,  $p < 0.01$ ). ERI accounted for 2.1% of the variation in adaptive performance with  $\beta$  at -0.166 and  $p < 0.001$ . EPIs had no significant effect on OCBO.

Rank was also significant in the model of individual performance, accounting for 2.4% of the variation in IRB ( $\beta = 0.156$ ,  $p < 0.001$ ), 5% of the variation in OCBI ( $\beta = 0.226$ ,  $p < 0.001$ ), and 4.5% of the variation in adaptive performance ( $\beta = 0.214$ ,  $p < 0.001$ ).

The results, therefore, indicate that hypothesis 2, 3a and 4 are partially supported; however, there is no clear pattern of a particular EPI having a consistent effect on individual performance. Hypothesis 3b is not supported.

Model	IRB					OCBI			
	B	SE	Beta	R <sup>2</sup>		B	SE	Beta	R <sup>2</sup>
1 (Constant)	3.804	.121		.008		3.644	.113		.018
JOBSTR	-.037	.048	-.037			.054	.045	.059	
GENDER	.019	.059	.015			-.041	.055	-.036	
OVERCOM	-.055	.036	-.074			.077	.034	.109	
2 (Constant)	3.690	.124		.032		3.489	.115		.068
JOBSTR	-.042	.047	-.043			.047	.044	.051	
GENDER	.041	.059	.034			-.011	.054	-.009	
OVERCOM	-.064	.036	-.085			.065	.033	.093	
RNK	.065	.020	.156***			.089	.018	.226***	
3 (Constant)	3.038	.225		.058		2.966	.209		.087
JOBSTR	-.070	.048	-.072			.024	.044	.026	
GENDER	.076	.059	.063			.018	.055	.016	
OVERCOM	-.068	.036	-.091			.062	.033	.087	
RNK	.059	.020	.141**			.084	.018	.213***	
ARF	.145	.042	.168***			.116	.039	.143**	
4 (Constant)	3.043	.234		.059		2.886	.217		.092
JOBSTR	-.067	.048	-.068			.024	.045	.026	
GENDER	.082	.060	.067			.011	.055	.010	
OVERCOM	-.070	.036	-.093			.062	.033	.089	
RNK	.058	.020	.139**			.087	.018	.221***	
ARF	.142	.042	.165***			.125	.039	.154**	
EPROVALI	.000	.004	-.008			.005	.004	.071	
ECOMVALI	.002	.004	.030			-.004	.003	-.055	
5 (Constant)	3.102	.241		.063		3.050	.221		0.115
JOBSTR	-.070	.048	-.071			.025	.044	.028	
GENDER	.090	.060	.074			.025	.055	.022	
OVERCOM	-.077	.036	-.103			.048	.033	.068	
RNK	.056	.021	.134**			.068	.020	.173***	
ARF	.130	.043	.151**			.103	.040	.126**	
EPROVALI	-.002	.004	-.028			.001	.004	.011	
ECOMVALI	.003	.004	.038			-.004	.003	-.053	
APROVALI	.001	.004	.021			.009	.003	.146**	
ACOMVALI	.003	.003	.065			.003	.002	.065	
6 (Constant)	3.157	.243		.069		3.083	.223		0.117
JOBSTR	-.076	.048	-.077			.022	.044	.024	
GENDER	.086	.060	.071			.023	.055	.020	
OVERCOM	-.046	.041	-.062			.066	.037	.093	
RNK	.057	.021	.136**			.068	.020	.174**	
ARF	.127	.043	.147**			.101	.040	.124*	
EPROVALI	-.002	.004	-.023			.001	.004	.014	
ECOMVALI	.003	.004	.040			-.003	.003	-.052	
APROVALI	.001	.004	.014			.009	.003	.142**	
ACOMVALI	.003	.003	.053			.003	.002	.057	
ERI	-.118	.073	-.086			-.069	.067	-.054	

\*  $p < 0.05$  \*\*  $p < 0.01$  \*\*\*  $p < 0.001$

Table 8.3 – Hierarchical Regression Results 2

Model	OCBO					ADAPTIVE			
	B	SE	Beta	R <sup>2</sup>		B	SE	Beta	R <sup>2</sup>
1 (Constant)	3.742	.127		.006		4.018	.114		.028
JOBSTR	-.059	.051	-.057			.103	.045	.110*	
GENDER	.063	.062	.050			-.121	.056	-.105*	
OVERCOM	.032	.038	.041			-.078	.034	-.109*	
2 (Constant)	3.644	.132		.022		3.869	.116		.073
JOBSTR	-.064	.050	-.062			.096	.044	.103*	
GENDER	.083	.062	.065			-.092	.055	-.079	
OVERCOM	.025	.038	.032			-.089	.034	-.124**	
RNK	.056	.021	.127**			.085	.019	.214***	
3 (Constant)	3.447	.241		.024		3.244	.210		.100
JOBSTR	-.072	.051	-.070			.069	.044	.074	
GENDER	.093	.063	.073			-.058	.055	-.050	
OVERCOM	.024	.038	.030			-.093	.033	-.130**	
RNK	.054	.021	.123*			.079	.019	.199***	
ARF	.044	.045	.048			.139	.039	.169***	
4 (Constant)	3.376	.251		.027		3.260	.217		.112
JOBSTR	-.065	.052	-.063			.054	.045	.058	
GENDER	.098	.064	.077			-.078	.055	-.068	
OVERCOM	.022	.038	.028			-.087	.033	-.122**	
RNK	.055	.021	.126**			.081	.019	.205***	
ARF	.046	.045	.051			.147	.039	.179***	
EPROVALI	.004	.004	.048			.000	.004	.005	
ECOMVALI	.001	.004	.011			-.008	.003	-.115*	
5 (Constant)	3.396	.258		.029		3.402	.222		.129
JOBSTR	-.061	.052	-.059			.055	.045	.059	
GENDER	.096	.064	.075			-.066	.055	-.057	
OVERCOM	.023	.039	.029			-.100	.033	-.141**	
RNK	.048	.023	.109*			.066	.020	.166***	
ARF	.048	.046	.053			.128	.040	.155***	
EPROVALI	.003	.004	.041			-.003	.004	-.046	
ECOMVALI	.000	.004	.003			-.008	.003	-.112*	
APROVALI	.003	.004	.046			.008	.003	.119*	
ACOMVALI	-.002	.003	-.039			.003	.002	.062	
6 (Constant)	3.407	.261		.029		3.503	.221		.150
JOBSTR	-.062	.052	-.060			.044	.044	.047	
GENDER	.095	.064	.074			-.074	.055	-.064	
OVERCOM	.028	.044	.036			-.044	.037	-.062	
RNK	.048	.023	.109*			.067	.020	.169***	
ARF	.048	.046	.053			.122	.039	.148**	
EPROVALI	.003	.004	.042			-.003	.004	-.036	
ECOMVALI	.000	.004	.004			-.007	.003	-.109*	
APROVALI	.003	.004	.045			.007	.003	.107*	
ACOMVALI	-.002	.003	-.041			.002	.002	.038	
ERI	-.022	.079	-.015			-.217	.067	-.166***	

\*  $p < 0.05$  \*\*  $p < 0.01$  \*\*\*  $p < 0.001$

Table 8.4 – Hierarchical Regression Results 3

### 8.1.4 Hypothesis 5

#### Hypothesis 5

$H_0$ : Organisational alignment will be a function of individual performance

$H_1$ : Organisational alignment will not be a function of individual performance

Referring to table 8.1, the results indicate that significant ( $p < 0.01$ ) slight to strong correlations are seen between all of the measures of individual performance and the measures of organisational alignment. These results support hypothesis 5.

Model	GOALCON				ALIGNMT				COLALIGN			
	B	SE	Beta	R <sup>2</sup>	B	SE	Beta	R <sup>2</sup>	B	SE	Beta	R <sup>2</sup>
1 (Constant)	2.846	.207		.017	2.345	.160		.150	2.293	.272		.059
IRB	.155	.057	.130**		.384	.044	.387***		.390	.074	.244***	
2 (Constant)	2.074	.247		.077	1.322	.179		.303	1.023	.319		.150
IRB	-.022	.064	-.018		.150	.046	.152***		.099	.083	.062	
OCBI	.361	.068	.287***		.479	.049	.457***		.595	.087	.352***	
3 (Constant)	2.065	.263		.077	.909	.180		.372	.873	.338		.154
IRB	-.024	.067	-.020		.055	.046	.056		.065	.087	.040	
OCBI	.359	.070	.285***		.389	.048	.371***		.562	.091	.333***	
OCBO	.006	.061	.006		.288	.042	.306***		.104	.078	.069	
4 (Constant)	1.867	.259		.129	.803	.180		.393	.754	.340		.164
IRB	-.169	.071	-.142*		-.022	.050	-.022		-.022	.094	-.014	
OCBI	.116	.084	.092		.259	.058	.248***		.417	.110	.247***	
OCBO	.006	.059	.005		.287	.041	.306***		.104	.078	.069	
ADAPT	.445	.088	.358***		.237	.061	.229***		.266	.116	.160*	

\*  $p < 0.05$  \*\*  $p < 0.01$  \*\*\*  $p < 0.001$

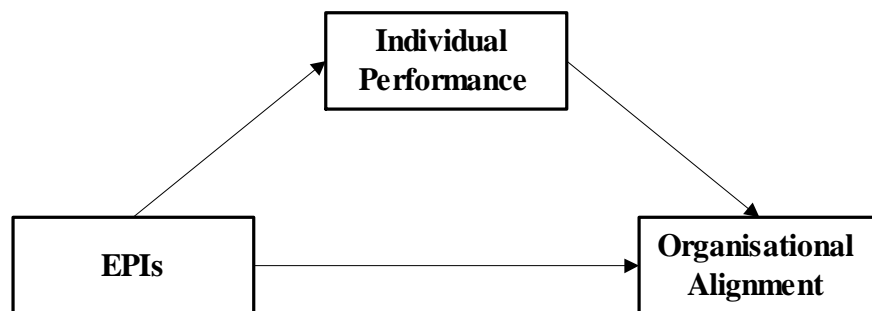
Table 8.5 – Hierarchical Regression Results 4

Hierarchical regression for hypothesis 5 used four bricks, each with one of the constructs of individual performance. The results, at table 8.5, indicate that IRB accounts for 15% of the variation in strategically aligned behaviours ( $\beta = 0.387$ ,  $p < 0.001$ ) and 5.9% of the variation in colleagues' aligned behaviour ( $\beta = 0.244$ ,  $p < 0.001$ ).

OCBI accounted for 6% of variation in goal congruence ( $\beta = 0.287$ ,  $p < 0.001$ ), 15.3% of the variation in strategically aligned behaviours ( $\beta = 0.457$ ,  $p < 0.001$ ) and 9.1% of the variation in colleagues' aligned behaviours ( $\beta = 0.352$ ,  $p < 0.001$ ). OCBO accounted for 6.9% of the variation in strategically aligned behaviours ( $\beta = 0.306$ ,  $p < 0.001$ ). Finally adaptive performance accounted for 5.2% of the variation in goal congruence ( $\beta = 0.358$ ,  $p < 0.001$ ), and 2.1% of the variation in strategically aligned behaviours ( $\beta = 0.229$ ,  $p < 0.001$ ). These findings further support hypothesis 5.

#### 8.1.5 Mediation

In order to test whether a variable acts as a mediator between an independent variable and a dependent variable, it is first necessary to test for significant correlations between the independent variable and the dependent variable, and between the mediating variable and the dependent variable. Where significant correlations are identified, three multiple regression tests are carried out (Baron and Kenny, 1986; Kim *et al.*, 2001). In the first, the mediating variable is regressed on the independent variable. In the second, the dependent variable is regressed on the independent variable. In the third, the dependent variable is regressed on both the mediating variable and the independent variable simultaneously. The third regression is then compared with the second regression and if the path from the independent variable to the dependent variable is non-significant in the third regression, then mediation is established (Baron and Kenny, 1986).



*Figure 8.1 – Mediation Model*

This four-step procedure was applied to explore all significant correlations of the variables in the formal research model with the six measures for EPIs as the



independent variables, four measures for individual performance as the mediating variables, and the three measures for organisational alignment as the dependent variables. After the removal of combinations of variables that were not significantly associated, a total of 28 mediation tests were conducted using the four-step process (Baron and Kenny, 1986). Full mediation is supported when a significant relationship between the independent variable (IV) and the dependent variable (DV) becomes non-significant with the introduction of the mediating variable (MV). Partial mediation is supported where there is a reduction in the  $\beta$  when comparing step 2 with step 3.

The results indicated 10 situations where the particular construct of individual performance fully mediated the relationship between the particular EPI and organisational alignment, and nine situations of partial mediation. These 19 results are listed at table 8.6.

#### 8.1.6 Common Method Variance

Common Method Variance (CMV) occurs when the measurement instrument causes a variance that is then attributed to the constructs being measured. This can be a problem for self-report questionnaires, particularly in a single case setting (Podsakoff and Organ, 1986). To check for CMV, Harman's one-factor test was carried out, with each item of the questionnaire and each variable loaded into an unrotated factor analysis. In the Harman's test, if a single item accounts for a large proportion of variance among the items, then CMV may exist, although meeting the requirements of the test is only an indicator that CMV may not be a problem (Podsakoff and Organ, 1986).

The factor analysis returned eight factors accounting for 49.7% of variance with the most considerable single factor accounting for 16.08% of the variance. This finding suggests that based on this test, CMV is not an issue in this research.

The following table, over two pages, presents the supporting results for mediation.

Variables				Results			
				B	SE	Beta	R <sup>2</sup>
1	IV = ERI	MV = IRB	DV = ALIGNMT				
	Step 1			-.171	.065	-.125**	.016
	Step 2			-.358	.063	-.264***	.070
	Step 3			-.297	.059	-.219***	.198
				.357	.043	.360***	
2	IV = ERI	MV = IRB	DV = COLALIGN				
	Step 1			-.171	.065	-.125**	.016
	Step 2			-.574	.101	-.263***	.069
	Step 3			-.516	.100	-.236***	.114
				.343	.073	.214***	
3	IV = ARF	MV = IRB	DV = ALIGNMT				
	Step 1			.135	.041	.157***	.025
	Step 2			.099	.041	.116*	.013
	Step 3			.049	.038	.057	.150
				.370	.045	.374***	
4	IV = ARF	MV = IRB	DV = COALIGN				
	Step 1			.135	.041	.157***	.025
	Step 2			.164	.066	.119*	.014
	Step 3			.115	.065	.083	.064
				.362	.076	.226***	
5	IV = APROVALI	MV = OCBI	DV = ALIGNMT				
	Step 1			3.578	.739	.226***	.051
	Step 2			.011	.003	.167***	.028
	Step 3			.003	.003	.048	.289
				.549	.044	.525***	
6	IV = APROVALI	MV = OCBI	DV = COLALIGN				
	Step 1			3.578	.739	.226***	.051
	Step 2			.011	.005	.106*	.011
	Step 3			.002	.005	.020	.148
				.641	.077	.380***	
7	IV = ACOMVALI	MV = OCBI	DV = GOALCON				
	Step 1			2.527	.970	.124**	.015
	Step 2			.010	.003	.160***	.026
	Step 3			.008	.003	.127**	.093
				.329	.058	.262***	
8	IV = ACOMVALI	MV = OCBI	DV = COLALIGN				
	Step 1			2.527	.970	.124**	.015
	Step 2			.010	.004	.123**	.015
	Step 3			.006	.004	.076	.153
				.633	.075	.375***	
9	IV = ARF	MV = OCBI	DV = ALIGNMT				
	Step 1			.215	.058	.175***	.031
	Step 2			.099	.041	.116*	.013
	Step 3			.020	.035	.024	.283
				.554	.044	.527***	
10	IV = ARF	MV = OCBI	DV = COLALIGN				
	Step 1			.215	.058	.175***	.031
	Step 2			.164	.066	.119*	.014
	Step 3			.075	.062	.054	.147
				.628	.077	.370***	

(continued)

Variables		Results			
		B	SE	Beta	R <sup>2</sup>
11	IV = ERI MV = ADAPT DV = GOALCON				
	Step 1	-.165	.035	-.216***	.047
	Step 2	-.751	.069	-.462***	.213
	Step 3	-.663	.068	-.408***	.273
		.310	.052	.250***	
12	IV = ERI MV = ADAPT DV = ALIGNMT				
	Step 1	-.165	.035	-.216***	.047
	Step 2	-.358	.063	-.264***	.070
	Step 3	-.218	.056	-.161***	.289
		.469	.043	.479***	
13	IV = ERI MV = ADAPT DV = COLALIGN				
	Step 1	-.165	.035	-.216***	.047
	Step 2	-.574	.101	-.263***	.069
	Step 3	-.427	.098	-.195***	.162
		.522	.075	.313***	
14	IV = APROVALI MV = ADAPT DV = ALIGNMT				
	Step 1	2.425	.740	.155***	.024
	Step 2	.011	.003	.167***	.028
	Step 3	.006	.003	.089*	.272
		.517	.043	.500***	
15	IV = APROVALI MV = ADAPT DV = COLALIGN				
	Step 1	2.425	.740	.155***	.024
	Step 2	.011	.005	.106*	.011
	Step 3	.006	.005	.052	.129
		.579	.076	.347***	
16	IV = ACOMVALI MV = ADAPT DV = GOALCON				
	Step 1	1.925	.961	.096*	.009
	Step 2	.010	.003	.160***	.026
	Step 3	.008	.003	.129**	.131
		.405	.056	.326***	
17	IV = ACOMVALI MV = ADAPT DV = COLALIGN				
	Step 1	1.925	.961	.096*	.009
	Step 2	.010	.004	.123**	.015
	Step 3	.007	.004	.090*	.134
		.578	.075	.346***	
18	IV = ARF MV = ADAPT DV = ALIGNMT				
	Step 1	.246	.057	.202***	.041
	Step 2	.099	.041	.116*	.013
	Step 3	.011	.036	.013	.260
		.526	.044	.507	
19	IV = ARF MV = ADAPT DV = COLALIGN				
	Step 1	.246	.057	.202***	.041
	Step 2	.164	.066	.119*	.014
	Step 3	.069	.063	.050	.125
		.569	.077	.340	

\*  $p < 0.05$  \*\*  $p < 0.01$  \*\*\*  $p < 0.001$

Table 8.6 - Mediation Results

### 8.1.7 *Questionnaire Discussion*

The results of the questionnaire firstly emphasise that the concepts of EPIs and how they are measured are very important as different approaches led to different findings. In particular, the lack of significant correlations between ERI and most other measures of EPIs is noteworthy, with only one very weak significant negative correlation between ERI and the product of value of a commendation and duration since a realised commendation. This will be discussed further in the next chapter but at this stage it is worth noting the results are consistent with the three perspectives of individual performance reviewed in chapter 3 of this thesis (section 3.3, pp.25-28; Sonnetag and Frese, 2002). Furthermore, expectations of an EPI, whether it be a promotion or a commendation, did not significantly generally correlate to either the measures of organisational alignment or to the constructs of individual performance, again with only one significant weak positive correlation between officers' expectations of promotion and their perception of colleagues' aligned behaviour.

In terms of operational hypotheses 1, the full results of correlation testing, hierarchical regression and mediation testing suggest that EPIs do not general relate to all measures of organisational alignment, with the clear exception when EPIs are measured in terms of ERI. ERI has significant moderate to strong negative correlations with each of goal congruence on the strategy acceptance scale, strategically aligned behaviour, and perceptions of colleagues' aligned behaviour, and also accounts for between 5.1% and 22.5% of variation in organisational alignment depending on the measure adopted. Mediation testing indicated that there were some instances of mediation between ERI and organisational alignment by IRB and adaptive performance, however, the mediation was partial. Other exceptions were the significant slight positive correlation between the realisation of a commendation and goal congruence, and the significant slight positive correlation between expectations of promotion and perception of colleagues' aligned behaviour. In summary, hypothesis 1 is supported, conditional on the scales adopted.

The results for hypotheses 2, 3a, 3b and 4 indicate that in general EPIs do not relate to the constructs of individual performance. Significant exceptions include higher annual report ratings being positively related to task performance (IRB) and adaptive performance, although this is, perhaps, merely confirming the purpose of such a report

and might have no significance for the rating as an incentive. The realisation of a promotion is positively related to OCBI, although of course, promotion itself leads to higher rank, which has many other perceived benefits such as status and position. The results indicate that rank plays a significant role in IRB, OCBI and adaptive performance, accounting for between 2.4% and 5% in the variation of these performance constructs. A separate exploratory test of mediation between realised promotion and OCBI by rank indicated that rank does indeed partially mediate this relationship. ERI is negatively related to adaptive performance. In summary, no clear pattern emerged in the questionnaire results to generally support hypotheses 2, 3a, 3b, or 4.

The correlations between the four elements of individual performance and the three measures of organisational alignment indicate slight to strong correlations between performance and alignment. The hierarchical regressions indicate that the scales for individual performance account for 12.9% of the variation in goal congruence, 39% of the variation in the strategically aligned behaviour scale, and 16.4% of colleagues' aligned behaviours. The results of mediation testing also indicate that the constructs of individual performance mediated to varying extents between the EPIs and organisational alignment, with the exception of OCBO, which had no significant role in mediation. In summary, organisational alignment is a function of individual performance, supporting hypothesis 5.

In order to explore the research question in light of the above findings, semi-structured interviews were conducted.

## **8.2 Semi-structured Interview Findings**

It was clear from all interviews that promotion is by far the most important EPI for police officers, with commendations and letters of appreciation less important and annual reports even less so. It was expressed that other EPIs were often considered solely in terms of the contribution they make towards promotion chances, and that in their own right they were merely pieces of paper with little meaning.

*“Promotion, I would put number one, definitely. Compliments are the second and the annual report is least important. Compliments and annual reports are somehow related to promotion because if you get a string of good annual reports you stand a better chance of promotion, so they can’t really be separated.”*

*“JPOs [Junior Police Officers] are very keen on getting commendations. They believe that it’s a very powerful tool to bring them to a promotion board. They believe that commendations are related to promotion.”*

*“..... promotion is the only motivator!”*

Corresponding to the findings in the questionnaire where there was little variation in ratings given, annual report appraisals other than outstanding were often viewed negatively.

*“They don’t care much about the report but if I give a ‘B’, although ‘B’ is not bad according to the grading, they are not happy with ‘B’ at all. ‘B’ seems like fail - it’s almost like a punishment.”*

*“People expect an ‘A’ or a ‘B’ so they are powerful but not really useful to me [as a commander].”*

During the first three interviews it became apparent that police officers might generally distinguish their colleagues into three or four groups relating to the stage of their career and their prospects for promotion. Officers in the first group (group A) are in the junior stages of their career and they are keen on building their knowledge and performance in order to get recognised for future promotion chances. They are highly motivated by the chance of receiving written compliments, which are a form of local commendation used to recognise good performance. The main long-term incentive is promotion and there is a strong perception that written compliments give credit in promotion assessments.

*“Young guys who are new to the job - I think, the junior guys are more focused on team work. Everyone who is junior is motivated by promotion because they have the enthusiasm.”*

The second group are those officers in the band for promotion based on their length of service and career path. This group can be split into two sub-groups. In one sub-group (B1), officers are *approaching* their best chance for promotion but are not yet being short-listed for final interviews. This sub-group are highly motivated by commendations and written compliments and they expect outstanding annual reports. The other sub-group (B2) comprises those *in* the promotion bracket and perceived as being very close to promotion, generally having already been short-listed for interviews. This sub-group are not as motivated by commendations and compliments as groups A and B1, as they have already built up sufficient recognition in this area but they are more concerned about work performance.

*“Promotion though is always the ultimate motivation. If you are very close to promotion I think officers work very, very hard every day.”*

The third group (group C) includes those officers who are beyond the prospects of promotion. This group have effectively reached or exceeded their promotion potential and they are perceived as not being motivated by the EPIs selected for this research.

*“The older groups need just to be stable and get the salary as stable as possible. These people are very individual and not motivated .....”*

In terms of individual performance, each group of officers is perceived to be motivated in different ways by EPIs. Group A officers are motivated to carry out in-role tasks but they need to be closely supervised and are therefore less productive than other groups of officers. This group tend to be more focused on teamwork. Within the team they are able to learn from more experienced officers and are good colleagues as they are willing to give a great deal of effort. They seek out new experiences and are generally more open to learning than other groups. This group do not expect EPIs but they are appreciative of any commendations or compliments they receive.

*“..... they will be astonished because ..... in the first years of their career and they have a DC’s [District Commander’s] compliment ..... it’s something to brag about.”*

There is a perception that officers in general have a low degree of organisational commitment (OCBO) and that is not affected by EPIs.

*“I don’t have a feeling that even though we keep briefing them in training days on high level things, it seems that they don’t care that much about these things - it seems too remote for them.”*

*“....what the organisation wants requires too much effort .... they can only control what’s under their control.”*

It appears that with Group A officers, EPIs have some effect on the alignment of frontline performance by encouraging good teamwork (elements of OCBI) and support for their more advanced colleagues who provide formal and informal mentorship. The effect on task performance (IRB) is limited by the need for supervision and the levels of competence, but this group of officers are relatively adaptable, motivated by the longer-term prospect of promotion to learn new things and adapt to different working environments (Adaptive).

*“For the youngest group of officers - they are still learning. Hard to say that they can get the job done for sure but they will definitely try. They are good members of the team and always willing to give. They will always play safe as they do not want to be a burden to the team. They just want to learn .... learn new things and adapt.”*

*“[Newly promoted officers] are not in the promotion bracket anymore so they can be a good team player and a team leader - just get on with doing a good job.”*

Group B1 officers are somewhat differently motivated. They are highly task driven with the main purpose of getting noticed through commendations and compliments,



although it was perceived that promotion was their ultimate aim. They focus more on teamwork by trying to drive the results of the team up in order to gain more recognition.

*“Those who are keen on promotion, as they are approaching the time when they are near the promotion bracket they are very team focused .....”*

*“They are a lot more proactive. Their attitude is more positive. I would say that they don’t follow so much what the Force wants at a high level.”*

It appears that for this group the teamwork aspect of performance (OCBI) is sustained in the belief that teamwork will lead to successful frontline police-work which in turn will lead to commendations and compliments. Task performance (IRB) is almost certainly improved in the desire to gain extra recognition. In terms of adaptive behaviour it appears that this group will learn and adapt directly as a result of EPIs.

*“This group are able to learn but they do not have real enthusiasm to learn - they just learn to get a better chance of promotion, not really to learn new stuff but to get the credit.”*

There appears to be a perceived difference in individual performance between group B1 and group B2 officers. As frontline officers move from the zone approaching good promotion prospects to the actual promotion bracket, their work behaviour changes with less focus on teamwork (OCBI) and greater focus on their individual perspective and protecting themselves. They tend to take fewer risks in their duty and are less motivated to work hard, but more motivated to work carefully to avoid mistakes that could change their promotion prospects.

*“Those who are very keen on promotion, as they are approaching the time when they are near the promotion bracket they are very team focused but when they get into the bracket they become more individually focused. They don’t want to do anything wrong so the closer they get, they want to protect themselves and avoid doing something wrong.”*

In terms of adaptive behaviour, officers in this group tend to be inflexible and unwilling to learn new things, preferring to focus on maintaining a high level of knowledge for promotion interviews.

*“They want to persuade others to think like them rather than anything else. .... they are pretty individual I would say.”*

For group C officers it was generally perceived that the EPIs of promotion, commendations and annual reports did little to affect their individual performance or organisational alignment. In terms of task performance, officers generally did the minimum to avoid being noticed in terms of both the quality and quantity of work. Whilst working as a member of a team, again there was no commitment beyond the minimum and they show no interest in learning and adapting.

*“[they] just want to get the job done. Just get it right and nothing beyond that. In the team, they are members of the team but they rely on others more. They are certainly not the leader of the team. They would contribute but not more than they need. They don’t want to exceed the minimum requirement. They have no interest in learning new things.”*

When giving examples of behaviours that were apparently driven by EPIs, interviewees were able to present both functional and dysfunctional examples. The general perception was that there was a clear distinction of behaviour between those officers motivated by promotion and commendations, and those officers in group C, who had little or no prospect of promotion. In terms of functional behaviour, officers who are in pursuit of EPIs are generally more motivated to work harder and apply themselves beyond the minimum requirements of the task. One interviewee recounted that several officers had recently mounted a particularly well planned and successful policing operation which was rewarded with a District Commander’s compliment, spurring the officers to maintain their effort.

Officers in group A and B1 tend to be more focused on the teamwork aspects of policing, with both groups seeking recognition for EPIs. The more experienced officers

in group B1 are inclined to share their experience and provide mentorship whilst the younger officers are keen to learn and be good team members.

*“.... there is a clear cut difference, because they are there to really work and prove themselves - leadership, command presence and their ability to execute their job are all elements we are looking for ....”*

In terms of possible dysfunctional behaviour, officers in groups B2 and C are generally very cautious about their work and are more individualistic. Group B2 officers are perceived to want to lower their profile as they are already in the promotion bracket and do not want to make mistakes, tending to avoid close involvement with the team in order to protect themselves.

*“They become cautious because the team could drag them down.”*

Group C officers are perceived as unmotivated and merely doing the minimum to avoid negative attention.

*“They don’t avoid work - doing nothing is not possible but there’s an obvious feeling that there is a sharp decline in their eagerness, they will always be less driven and they don’t have the motivation anymore.”*

There were three examples given during the semi-structured interviews of dysfunctional organisational behaviour that was apparently influenced by EPIs. The first example is an officer who had been in the promotion bracket (group B2) but was unsuccessful in three consecutive interviews and had finally decided to decline consideration for promotion.

*“This year he declined to be considered for promotion - he’s not as keen as before - he’s given up basically. Whenever I see an officer give up on promotion I will see a sharp decline in his productivity.”*

The second example is of prosocial non-compliant behaviour (Puffer, 1987), in which an officer cuts corners on procedures or pushes too hard in order to gain recognition.

*“He always looked for arrests during the day and did a lot of extra work. He does extra observations on certain people. He might be prepared to step over the line. He actually would ..... [if] it might help him get cases if he needed them. If he needs to get the numbers up he can get guys.”*

The third example was of officers engaged in socially responsible activities for the sole purpose of gaining recognition in terms of points towards promotion. It was perceived that officers doing charity work had no particular desire to contribute to society but they perceived that such activity was recognised when assessing an officer for promotion suitability.

*“People do charity work in order to tick the box for promotion. Several days ago my [junior officer] handed me a certificate [to place in her record of service] saying that she had a silver award for doing 100 hours of charity work. I asked her whether she’d actually attended 100 hours of work, or how does it work? She said that at least she had to attend several sessions. It gave me a strong sense that she didn’t want to do it - she was just doing it as a must to put in her [record of service].”*

#### 8.2.1 Discussion on Semi-structured Interviews

The interviews provided some very useful insights into the main EPIs for frontline police officers and the effects that such incentives have on individual performance and work behaviour. Remarkably, there was frequent use of terms directly relating to adaptability.

In general, promotion is the main EPI for police officers, with commendations, compliments and letters of appreciation, and annual reports being important because it is perceived that they directly contribute to the promotion assessment. Annual report grades other than outstanding (A grade) were perceived to be almost a punishment, making questionable the effectiveness of the annual appraisal report rating as an incentive. The focus of officers’ work attention, though, appears to shift depending on the individual officer’s stage in the promotion stakes. These findings are consistent with all three perspectives of individual performance: the individual differences

perspective, the situational perspective, and the performance regulation perspective (Sonnetag and Frese, 2002).

Junior officers (A) who are in the early stages of their career are working towards promotion in the long-term by focusing on building their profile through teamwork and development. They are motivated to align their individual performance with the organisational strategy in that they hope to be recognised with compliments for tasks well done as part of the team. EPIs do not necessarily have any effect on their task performance as this largely depends on their experience, ability and the general need to work in the team, nor does it appear that EPIs have any effect on OCBO. However, it is perceived that EPIs have an effect on this group in terms of the need for professional recognition through good cooperation as the junior team member (OCBI) and through the willingness to learn and adapt.

Officers who are in the broad zone for promotion but are not yet being closely considered (B1) are perceived to be the most productive in terms of task performance. In terms of contextual performance, there appears to be no relationship between EPIs and OCBO but this group are motivated by commendations and compliments to work harder as a leader of the team (OCBI) both in raising productivity and mentoring junior officers. They are, however, perceived to be less adaptable than the more junior officers and it is possible that this group may be subject to some dysfunctional behaviour as they strive to be noticed.

Officers who are squarely in the promotion bracket and are being considered (B2) are perceived as no longer being motivated by commendations or compliments as much as merely biding their time and keeping out of trouble. They are perceived as having a reduced OCBI when compared with group B1 and they are not adaptable.

Officers who have recently been promoted are recognised as being more team oriented (OCBI) and focused on leading in their new rank.

Officers who have been passed over or who are not interested in promotion (C) are generally perceived to be unaffected by the EPIs discussed. Yet they also appear to have little intrinsic motivation, hence other EPIs not being investigated in this study,

such as the threat of disciplinary action for failing to do the minimum acceptable amount of work, are likely to be affecting performance.

A summary of the findings of the semi-structured interviews is at table 8.7.

<i><b>Relationships</b></i>	<i><b>IRB</b></i>	<i><b>OCBO</b></i>	<i><b>OCBI</b></i>	<i><b>Adaptive</b></i>
Group A	Nil	Nil	Positive	Positive
Group B1	Positive	Nil	Positive	Nil
Group B2	Nil	Nil	Negative	Nil
Group C	Nil	Nil	Nil	Nil

*Table 8.7 - Summary of Findings from Semi-structured Interviews*

### **8.3 Synthesis of Questionnaire and Semi-structured Interviews**

When comparing the results of the questionnaire and the findings of the semi-structured interviews there are several noteworthy observations. Firstly, it is clear from this study that when considering extrinsic incentives, it is not so much the tangible or intangible reward that is relevant to organisational alignment or individual performance as it is the performance regulation perspective (Sonnetag and Frese, 2002). Hence when considering the formal research model, ERI is a far more meaningful measure of EPIs than the reward itself, as it takes into account rewards, expectancy and reciprocity (Seigrist *et al.*, 2004).

Secondly, whilst the OCBO scale in the questionnaire was very slightly outside of the margins of reliability, the consistency through the questionnaire analysis and the interviews suggests that it might be reasonable to accept that in this study EPIs have no effect on OCBO.

The lack of a pattern in the questionnaire to support the hypotheses that EPIs are positively related to the various constructs of individual performance is consistent with the findings in the interviews. It appears that individual performance closely relates to career stage rather than EPIs, although, of course promotion, career stage and EPIs are all closely related. When considering the detailed results of the questionnaire, those

officers who have recently received promotion as associated with higher OCBI, which is consistent with them being in group A or group B1 in their career path, as they are less likely to be in the bracket for another promotion. The questionnaire used failed to detect the negative correlation between OCBI and very high expectation of promotion in the near future. However, the precise questionnaire format and the linear analysis used are unlikely to detect a dip in OCBI in the period when promotion is expected in the very near future. In terms of contextual behaviour, both the results of the questionnaire and the findings from the interviews suggest a clear distinction between OCBO and OCBI.

The slight negative correlation between ERI and adaptive performance is consistent with the findings in the interviews, in that the officers in group A are intuitively likely to have a lower ERI than other groups, and a higher adaptive performance. The slight positive correlation seen in the questionnaire between the annual report rating and adaptive performance was generally, but not specifically consistent with the findings of the interviews.

#### **8.4 Summary**

A summary of the results of the questionnaire and the findings of the interviews is at table 8.8. The questionnaire results and interview findings were reasonably consistent, suggesting that the methodology was successful and that the outcomes are significant.

The next chapter discusses the research and presents conclusions from the study, implications for the case subject and proposals for future research.

	<i>Questionnaire</i>	<i>Semi-structured Interviews</i>
H1	ERI has a significant negative relationship with organisational alignment. A realised commendation has a positive relationship with goal congruence. The expectation of promotion has a positive relationship with perception of colleagues' aligned behaviour. Other EPIs have no significant relationship with organisational alignment.	Promotion and commendations are related to organisational alignment, moderated by the stage of career of an officer.
H2	Annual report ratings have a slight positive relationship with IRB. Other EPIs have no significant relationship with IRB.	EPIs have a positive correlation with IRB but only for group B1 officers approaching the promotion bracket .
H3a	EPIs have no significant relationship with OCBO.	EPIs have no correlation with OCBO.
H3b	Recently awarded promotions have a slight positive relationship with OCBI. Other EPIs have no significant relationship with OCBI.	There is a positive correlation between commendations and OCBI, with the exception of those officers firmly in the promotion bracket, who generally display relatively lower OCBI. Recently promoted officers were perceived as having higher OCBI.
H4	ERI has a slight negative relationship with adaptive performance. Realised promotion and annual report ratings had slight positive relationships with adaptive performance. Expectations of a commendation had a slight negative relationship with adaptive performance. Other EPIs have no significant relationship with adaptive performance.	Adaptive performance tends to relate to the stage of career of an officer during which recognition is important. Once recognition is earned or no longer required, then adaptive performance subsides.
H5	There are significant relationships between individual performance and organisational alignment.	There were no specific findings relating individual performance to organisational alignment.

*Table 8.8 - Summary of Results and Findings*



## **CHAPTER 9**

### **DISCUSSION, CONCLUSIONS AND PROPOSALS FOR FURTHER RESEARCH**

#### **9.1 Introduction**

This study has explored the research question by reviewing the relevant literature and identifying theories and models that are applicable to the subject area. A formal research theory was developed which was accompanied by a formal research model, and a set of operational hypotheses were established for testing, both quantitatively and qualitatively. By applying the formal research model and by considering the findings of the research, leaders and policy-makers are in a better position to understand how EPIs might be considered when endeavouring to align the performance of their frontline workers with the organisational strategy.

This chapter discusses the contributions and findings of the research, draws conclusions where possible, and makes recommendations for further research. Section 9.2 reviews the formal research model that was developed and the scales that were employed to measure each of the variables, including the EPIs that were explored in the research. Section 9.3 considers the results of the research and extends the formal research model to reflect the significant findings in the case study. Section 9.4 looks at the implications of the research for organisations, in particular the Hong Kong Police Force, and makes recommendations for the use of EPIs. The following section includes an evaluation of the research method and the case study, and the final section presents proposals for further research.

#### **9.2 Formal Research Model**

The formal research model (Figure 6.3, section 6.8, p.82) is based on the literature and has been developed by the researcher to provide a representative framework for the research. The model makes two important contributions to the established theories. The first is in linking organisational alignment, in terms of attitudes and behaviours, with the relatively well-established constructs of individual performance. The second is

in extending the concept of individual performance to include the constructs of IRB, OCB being divided to distinguish between OCBO and OCBI (Williams and Anderson, 1991), and adaptive performance. Podsakoff *et al.*, (2009) note the absence of research that has attempted to identify links between EPIs and OCBO and OCBI as separate constructs despite an apparent managerial understanding of the differences between the concepts. Schmitt *et al.* (2003) propose adding adaptive performance to task and contextual behaviour, but this study is the first known to the researcher where all four constructs are used to describe individual performance. Furthermore, the results of the quantitative questionnaire give additional empirical evidence to support the case for separating OCBO and OCBI as different constructs of organisational citizenship behaviour.

The measures of the variables in the model were identified from the literature where possible, with modified and new measures being developed by the researcher where necessary. As a consequence, several scales were used to measure both EPIs and organisational alignment. This ensured that the study maintained an element of confirmatory testing whilst still having scope for the exploration of concepts around the research model. There are several contributions in the development and use of scales that are described below.

Firstly, adaptive performance is relatively under-represented in research as a dimension of individual performance, but it is having an increasing relevance as responsiveness to change and continuous improvement become more important to organisations (Schmitt *et al.*, 2003). The development of the new adaptive performance scale, which was based on Pulakos *et al.* (2000), completes a package of scales for individual performance to bring the concept into the modern era. The use of the scale has offered new insights into the relationship between individual performance and organisational alignment in the case studied that will be useful to leaders and managers (see section 9.3). Furthermore, the correlations of the adaptive performance scale with the organisational alignment scales were generally as strong as, or stronger than the correlations with more established IRB and OCB scales, suggesting that the construct of adaptive performance is an important element of individual performance and that the scale could be valuable for further research.

Secondly, three different scales were used for organisational alignment. The findings indicated that distinct aspects of organisational alignment are affected in different ways and to different extents by EPIs, suggesting that multiple constructs of alignment should be measured. Furthermore, the strategically aligned behaviour scale (Gagnon and Michael, 2003) has been used in only a few studies, so this research added empirical evidence to support its relevance and further use. Thirdly, empirical support for the correlations between the constructs of individual performance and the constructs of organisational alignment has been improved through this study.

In addition, EPIs were represented in four different ways, ultimately with three types of incentive being researched, namely promotion, commendations and letters of appreciation, and annual appraisal report ratings.

The use of the effort-reward imbalance (ERI) scale as an indicator of EPIs is a new concept, as applications of the scale have been largely limited to research in the medical field. This is the first study known to the researcher where ERI has been used in the context of organisational alignment or individual performance, and one of very few such studies in organisational behaviour research (Martinson *et al.*, 2006, is one known example). The ERI scale shows considerable potential for further use in this field as it can be employed to represent the performance regulation perspective of incentives and it somewhat captures how a frontline worker feels in terms of the *valence*, *instrumentality* and *expectancy* of incentives (Vroom, 1964). In effect ERI looks to some extent at “*what is happening inside the individual that makes him perform?*” (Sonnetag and Frese, 2002). The absence of a clear correlation between ERI and other measures of EPI suggests that the measurement of EPIs cannot be directly related to the feelings of effort-reward imbalance and that even the most rewarded officers may feel that the rewards are still not sufficient. ERI has also provided some of the most compelling and interesting quantitative results that found support in the literature and triangulation from the qualitative research element (see section 9.3).

In conclusion, the formal research model presents a new comprehensive framework to study the alignment between frontline performance and organisational strategy. The scales adopted in this study were largely self-perception or peer and colleague perception which has enabled the researcher to conduct both positivist and phenomenological research using the same model.

### 9.3 **Enhanced Research Theory**

This study set out to explore how extrinsic performance incentives affect the alignment between frontline police performance and police strategy. In this section, the results and findings (Chapter 8) will be discussed in the context of the research question by referring to each of the EPIs measured in the study.

#### 9.3.1 *How Does ERI Affect the Alignment Between Frontline Police Performance and Police Strategy?*

All of the findings in the research related to ERI, when used as the measure of EPIs, are consistent with equity theory (Adams, 1965). In the case of the Hong Kong Police Force, there are significant negative relationship between officers' perceptions of ERI and goal congruence on the strategy acceptance scale, between officers' perceptions of ERI and strategically aligned behaviours, and between ERI and perceptions of their colleagues' strategically aligned behaviours. This suggests that EPIs have an effect on the alignment between frontline police performance and police strategy with officers who feel that they are not rewarded equitably for their efforts being less aligned than those who feel more equitably rewarded.

In addition, IRB is a partial mediator between ERI and both strategically aligned behaviour and colleagues' aligned behaviour. Interpreting this, officers who feel they are not equitably rewarded work less on the tasks in their job description and perceive that their colleagues do not work with behaviour that is aligned with the organisational strategy. Reducing task effort is one of several strategies that people who feel negative inequity can employ to restore equity (Dailey, 1990). Alternatively, and supported by the findings in the interviews, officers who are more focused on their task performance (IRB), particularly B1 and B2 officers, experience lower ERI because they possess relatively high levels of expectancy (Vroom, 1964). This mechanism is further supported in that adaptive performance also acted as a mediator between ERI and organisational alignment, yet only those officers in group A were associated with higher adaptive performance. The lower levels of expectancy in group A officers is coupled with higher adaptive performance and higher organisational alignment.

### 9.3.2 How Does Promotion Affect the Alignment Between Frontline Police Performance and Police Strategy?

Promotion was considered to be the most powerful of EPIs covered in the research however it appears to affect officers in different ways depending on their stage of career. In terms of organisational alignment, the results of the questionnaire indicated one significant slight positive relationship between the expectation of a promotion and the perception of colleagues' aligned behaviour, and a further slight positive relationship between a realised promotion and strategically aligned behaviours, although this was considered to be trivial.

A realised promotion returned significant slight positive relationships with both OCBI and adaptive performance. The interviews in this study further indicate that newly promoted officers are more likely than other officers to concentrate on leading and working with their team and they are motivated by doing a good job. This finding is somewhat similar to van Herpen *et al.* (2003) where workers reported relatively small changes in extrinsic motivation in the years after a promotion but more variable intrinsic motivation, increasing to a peak for those workers with three years since their promotion before falling for those whose promotion was in the more distant past, in an "inverted 'U' shape relationship".

The findings in this study are consistent with stewardship theory in that organisational alignment and performance are generally not significantly affected by promotion as an EPI, but the newly found authority of rank may increase the sense of esteem, empowerment and actualisation, those intrinsic factors that may proliferate as a reduction in ERI and an increase in organisational alignment (Davis *et al.*, 1997). This motivation gradually wanes with time, giving the slight positive correlations between perceived colleagues' aligned behaviour and strategically aligned behaviour, and the closeness duration since promotion.

The interview results suggest that officers who were expecting promotion in the near future exhibited behaviours that could be considered as individualistic, self-interested and unaligned with the organisational strategy. It was also apparent that officers who were near to promotion worked extremely hard on tasks, suggesting that IRB would be

higher, however, the questionnaire results did not support this finding, perhaps due to the size of the intervals used in the IRB scale. Finally, this research suggests that there is no correlation between OCBO and promotion.

Combining the qualitative findings of this research with the van Herpen *et al.* (2003) study, the evidence is consistent with the self-fulfilling prophecy of agency theory (Argyris, 1973; see section 4.5, p.42-43) occurring for those frontline police officers who perceive that they are very near to realising promotion.

### 9.3.3 *How Do Commendations and Letters of Appreciation Affect the Alignment Between Frontline Police Performance and Police Strategy?*

Commendations and letters of appreciation (collectively *commendations*) were seen as somewhat powerful EPIs, especially in building an officer's record of service in preparation for promotion.

In terms of organisational alignment, the duration since being awarded a commendation had a significant, slight positive relationship with goal congruence, perhaps reflecting a temporary feeling of organisational support, or reflecting that such rewards are given for acts that demonstrate organisationally aligned attitudes. There was also a slight negative relationship between the expectation of a commendation and strategically aligned behaviour, although this was considered to be trivial. From the findings of both the questionnaire and the interviews, there was no other significant correlation between commendations and other measures of organisational alignment.

Adaptive performance had a significant slight negative correlation with the expectation of being awarded a commendation, with officers expecting awards in the nearer future exhibiting lower levels of adaptive performance than those expecting awards in the more distant future or not at all.

Again, these observations are consistent with conditions of stewardship theory, where EPIs have no consistent significant effect on organisational alignment or individual performance, although it appears that expectations of a reward may induce conditions of agency theory for some officers (Davis *et al.*, 1997).

### 9.3.3 How Do Annual Report Ratings Affect the Alignment Between Frontline Police Performance and Police Strategy?

Annual report ratings were considered to be an important EPI, but based on the interview findings, a 'B' rating could be considered as a punishment. Annual report ratings had no significant relationship with organisational alignment, although there was a trivial positive correlation with perceptions of colleagues' aligned behaviour.

In terms of individual performance, there were significant positive correlations with IRB, OCBI and adaptive performance, but not for OCBO. This result is to be expected as the annual report ratings for frontline officers would naturally reflect individual performance as a reporting tool and not necessarily as an incentive.

### 9.3.4 Conclusions

In this study, the general results and findings are more consistent with stewardship theory than agency theory in that, whilst there may be changes in the attitude of officers at different stages of a career, in general, the direct award of EPIs does not substantially affect the various measures of organisational alignment. However, officers who are in the promotion bracket and officers who are beyond promotion hopes exhibit more agency type behaviour. In effect, a realised promotion acts as a short-term hygiene that can lead to diminished organisational alignment in conditions where agency theory applies (Herzberg *et al.*, 1959). In such a case, and looking to the findings in the interview phase, it can be concluded that an officer's stage of career is a significant influencing factor in the effect of EPIs on organisational alignment and individual performance.

What clearly does affect the organisational alignment of a frontline police officer is the self-perception of imbalance between the effort put in to work and the rewards received in terms of esteem, promotion opportunities and job security. This again supports stewardship theory in that those already aligned will tend to feel that their effort is equitably rewarded. Those officers who are working mainly for the extrinsic rewards of promotion, commendations and annual report ratings are likely to have a higher ERI and, based on this study, lower alignment.

Drawing on the combined findings in this case study, an enhanced research theory can be developed. In the Hong Kong Police Force, for those officers who are in the early stages in their career and for those who are approaching the bracket for promotion, the evidence suggests that stewardship is the general condition that applies. Under such conditions, EPIs as such have no significant effect on frontline officers' organisational alignment as officers are largely intrinsically motivated. However, officers with a low self-perception of ERI are more likely to be organisationally aligned than those with high self-perception of ERI.

For officers with no prospect of EPIs, it cannot be determined from this study whether stewardship or agency theory applies. However, the interview findings suggest that for this group of frontline officers, there is evidence of de-motivation and disinterest in line with the comments of Richardson (1995; see section 4.5.1, p.43).

#### **9.4 Implications for the Case Study Organisation**

The formal research model and the findings of the research are of immediate value to the Hong Kong Police Force and provide useful insights that might be generalised for wider consideration. Firstly, promotion is a highly prized reward that has a strictly limited supply, ultimately dependent on senior officers leaving the organisation. Given the potential negative effect that expectations of promotion have on the organisational alignment of officers in the promotion bracket, the organisation must be careful to manage the expectations of frontline officers to ensure that they perceive that they are in the promotion bracket for only a short period. This has implications for strategic succession planning, where future retirements and other officer turnover can be determined based on age profiles and recruitment and retention trends. In effect, officers should be interviewed for promotion only if there is a realistic expectation of being promoted in a relatively short period.

Perhaps the most significant finding is with respect to ERI, particular when the results of this study are considered alongside research in the medical field. Management attention should be focused on reducing the self-perceived ERI in frontline officers with the aim of increasing their alignment with the organisational strategy, which, based on the literature will have a positive effect on organisational performance (Porter, 1996).



In addition, it is suggested that workers with high ERI will tend to suffer more from stress (de Jonge *et al.*, 2000; Tsutsumi and Kawakami, 2004), hence, reducing ERI will have an additional positive effect by reducing the stress levels of police officers on the frontline. By reducing self-perceived ERI of frontline workers, the organisation can increase organisational alignment and improve the health of its officers.

## **9.5 Evaluation of the Study**

In general, the research successfully explored the relatively uncharted area of strategy implementation that links individual performance to organisational alignment, adding to a limited body of empirical research. The literature was critically reviewed and a new framework of organisational alignment was developed using an enhanced model of individual performance.

Given the exploratory nature of the study, there are several limitations that must be considered. The full statistical analysis was limited to the sample as a whole, whereas there is scope to explore sub-groups within the questionnaire sample. Furthermore, the sample size for the semi-structured interviews was small and the analysis was limited to concept mapping with no statistical content analysis conducted. Despite these limitations, the quality of the sample and the critical insights gained provide a valuable contribution in the topic area.

Secondly, the limitations and circumstances of the study meant that the semi-structured interviews were all conducted in English which, despite the candidates' being fluent, was their second language. Also, in one of the interviews with a Police Constable, the researcher perceived some hesitation on answering questions that was not present in other interviews. As the researcher is a serving police officer, relatively senior in rank, it is likely that there was a high degree of researcher influence in interviews. The researcher felt that he managed the situation well by establishing a good rapport and was arguably able to establish trust quicker than another researcher might, however, the limitations must be acknowledged.

Thirdly, the use of self-perception and peer-perception in the study with no concrete quantitative triangulation means there is still a gap that needs to be addressed between

the types of organisational alignment presented in the strategic management literature, the operations management literature and the human resources management literature (see section 2.5, pp.12).

Finally, the case study focused on a single organisation that is unique in many respects but with many characteristics that are common to other organisations, particularly police forces. The ability to generalise the *findings* of this research is limited in that the phenomenological approach embraces the particular context of the case study, the HKPF, and it is difficult to isolate the unique from the general characteristics of the organisation studied. However, the research approach and formal research model can be generalised.

Despite these limitations, the research provides valuable empirical evidence regarding the effects of EPIs and a critically different approach to measuring organisational alignment and individual performance, and a practical framework for further research.

## **9.6 Proposals for Further Research**

Further research in this area should adopt the formal research model (Figure 6.3, section 6.8, p.82). In order to enhance the value of the model, the scales for EPIs, adaptive performance and organisational alignment should be further explored and fine-tuned in order to establish robust and widely accepted measures. The individual differences perspectives on the value placed on incentives should be adopted in future studies on EPIs.

Having adopted the model, further research can be conducted to address some of the limitations of this study. Quantitative studies using samples from multiple police and other organisational settings should now be conducted to provide more concrete data and to identify the alignment and performance of more sub-groups of the organisation, in particular to conduct team level analysis. In different organisational settings, a wider range of EPIs could also be tested to identify differences between tangible and non-tangible extrinsic rewards and different scales could be used to expand beyond self-reporting by using matched manager/subordinate pairings and peer reporting. Qualitative studies using semi-structured interviews that are conducted by independent

interviewers should also be considered, although such studies have resources and access implications. Longitudinal studies that map frontline workers' individual performance and organisational alignment through their career could be conducted to establish the moderating factor of career stage, although the levels of turnover in many organisations may hamper this type of research.

Finally, ERI showed particular potential as a measure of the effect of EPIs, indicating clear evidence of the performance regulation perspective of individual performance. Officers with perceived higher ERI were generally more aligned with the organisational strategy. This suggests that *stewards* as opposed to *agents* are more aligned workers. Given the negative correlations discovered in other research between ERI and stress levels, in which employees with a high ERI reported high levels of "*emotional exhaustion, psychosomatic health complaints, physical health complaints and job dissatisfaction*" (de Jonge *et al.*, 2000), this initial indication may have serious implications in terms of health risks for frontline police officers who are primarily motivated by extrinsic rewards. ERI provides an interesting topic for further exploratory research in organisational alignment and individual performance (Siegrist, 2004).

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